



**Weatherford**<sup>®</sup>

**CML WELL SHUTTLE  
COMPENSATED PHOTO-DENSITY  
COMPENSATED NEUTRON LOG**

COMPANY **SANDRIDGE EXPLORATION & PRODUCTION**

WELL **YOST 2729 1-33H**

FIELD

PROVINCE/COUNTY **GRAY**

COUNTRY/STATE **USA / KANSAS**

LOCATION **200' FNL & 2240' FWL  
NW NE NE NW**

SEC **33** TWP **27** RGE **29W** Other Services

API Number **15-069-20430-01**

Permit Number

Permanent Datum G.L., Elevation 2747 feet

Log Measured From KB

Drilling Measured From K.B.

Date **01-MAR-2013** Elevations: **KB 2766.00  
DF 2766.00  
GL 2747.00**

Run Number **ONE**

Depth Driller **9033.00** feet

Depth Logger **9005.00** feet

First Reading **8947.00** feet

Last Reading **4000.00** feet

Casing Driller **5535.00** feet

Casing Logger **5530.00** feet

Bit Size **6.125** inches

Hole Fluid Type **WATER**

Density / Viscosity **9.10** lb/USg **31.00** CP

PH / Fluid Loss **11.20** **12.00** ml/30Min

Sample Source **FLOWLINE**

Rm @ Measured Temp **1.95 @ 66.5** ohm-m

Rmf @ Measured Temp **1.56 @ 66.5** ohm-m

Rmc @ Measured Temp **2.34 @ 66.5** ohm-m

Source Rmf / Rmc **CALC** **CALC**

Rm @ BHT **0.98 @131.0** ohm-m

Time Since Circulation **1 HOUR**

Max Recorded Temp **131.00** deg F

Equipment Name **COMPACT**

Equipment / Base **18064** **OKC**

Recorded By **C. GRIFFIN**

Witnessed By **W. SCOTT**

S.O.#/AFE **3539592 / DC12629**

**BOREHOLE RECORD**

Last Edited: 03-MAR-2013 10:42

Bit Size inches	Depth From feet	Depth To feet
6.125	5535.00	9033.00

**CASING RECORD**

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
INTERMED	7.000	0.00	5535.00	26.00

**REMARKS**

WLS SOFTWARE VERSION 13.03. USED.  
 TOOLS RUN ON DRILLPIPE USING COMPACT WELL SHUTTLE DEPLOYMENT TECHNIQUE.  
 DEPTH MEASURED USING ADVANTAGE RIG DEPTH CORRECTED TO PIPE TALLY.  
 TOOLS DEPLOYED WITH MULE SHOE SITTING AT 8904FT.  
 AFTER DEPLOYMENT LOGGING TOOL WAS AT 9005 FT.  
 4.5" PRODUCTION CASING USED TO CALCULATE ANNULAR HOLE VOLUMES.  
 OPERATORS: J. TURNER  
 RIG: LARIAT 20

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

# 5 INCH MAIN PASS DSC

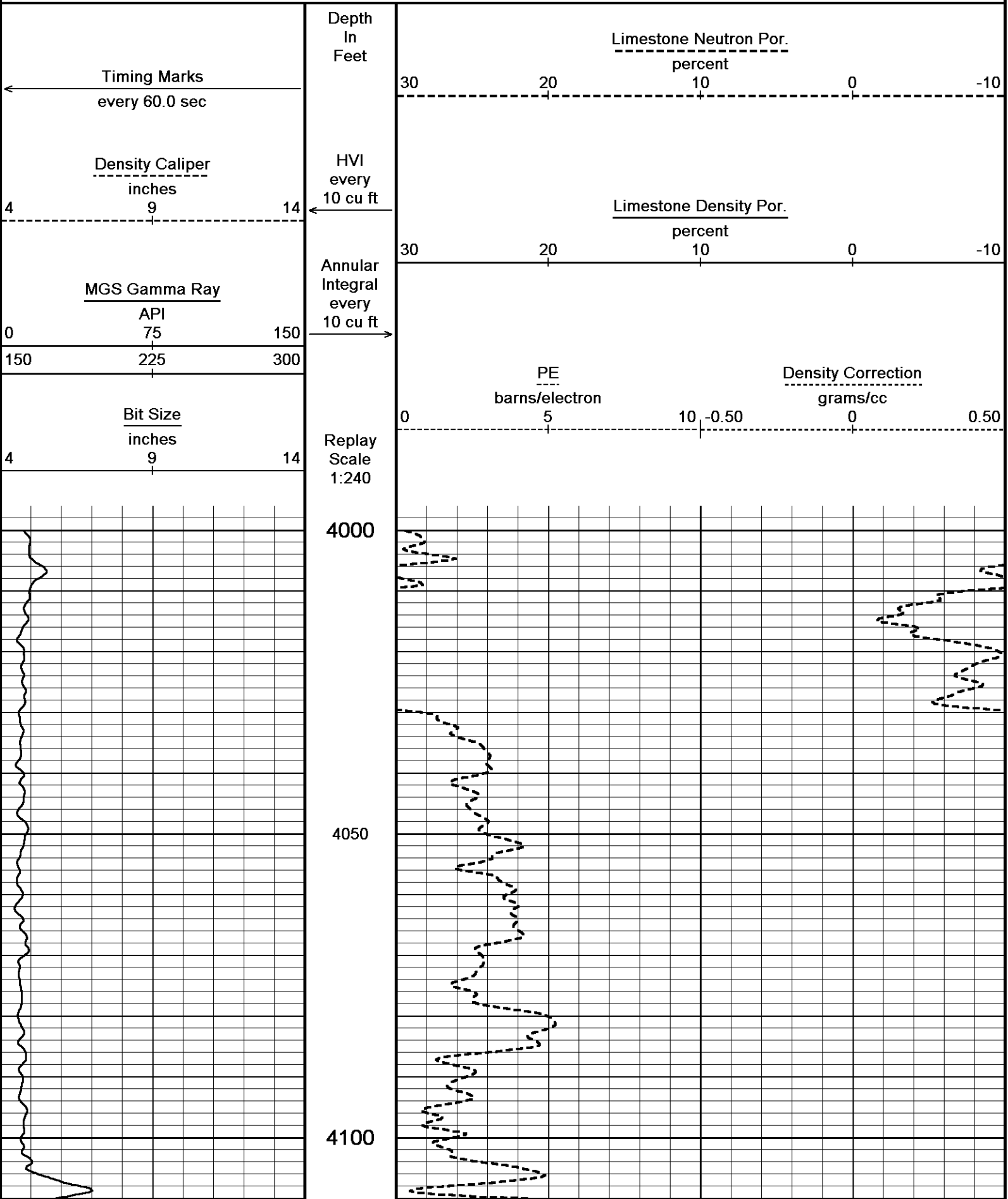
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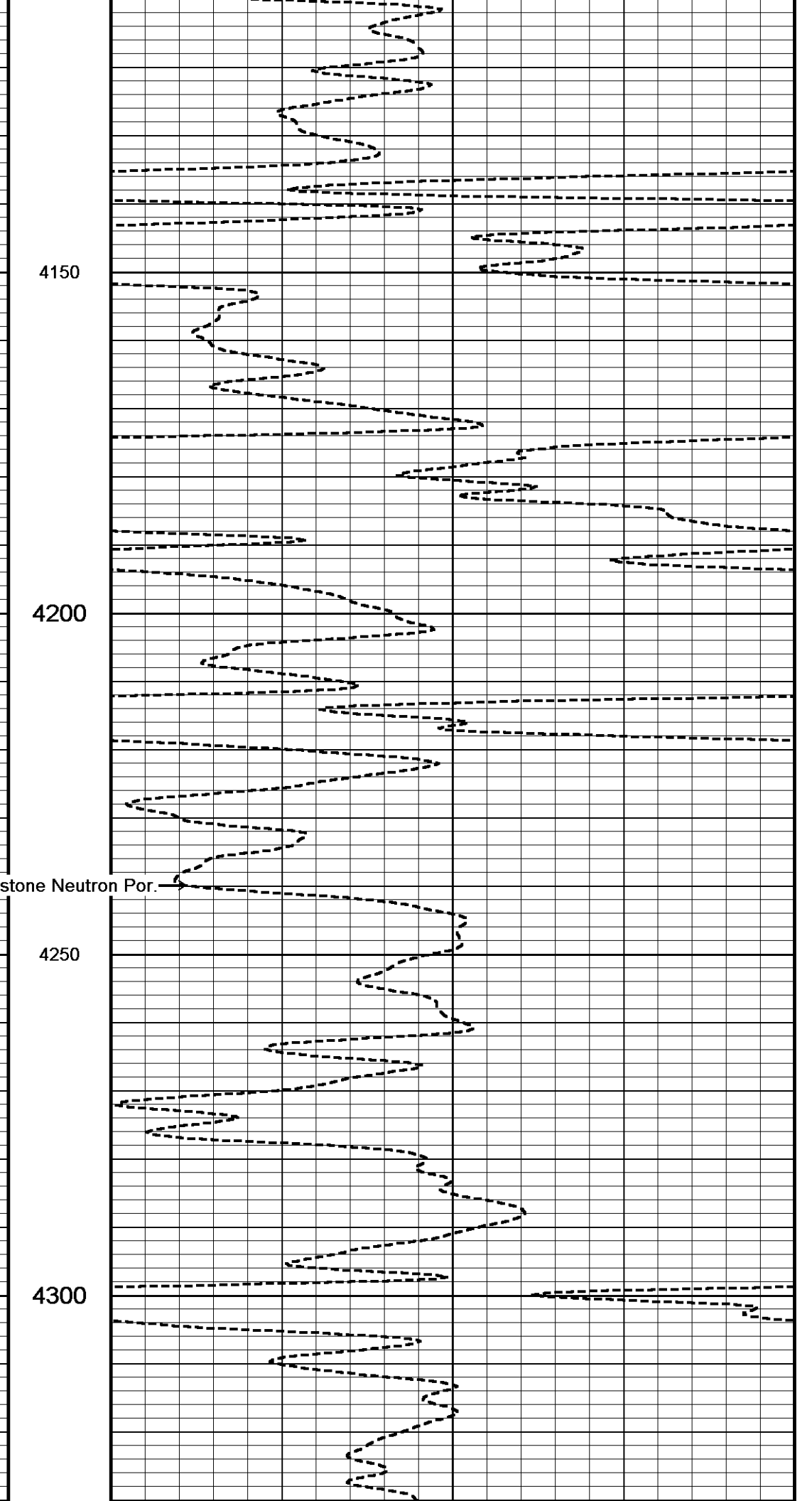
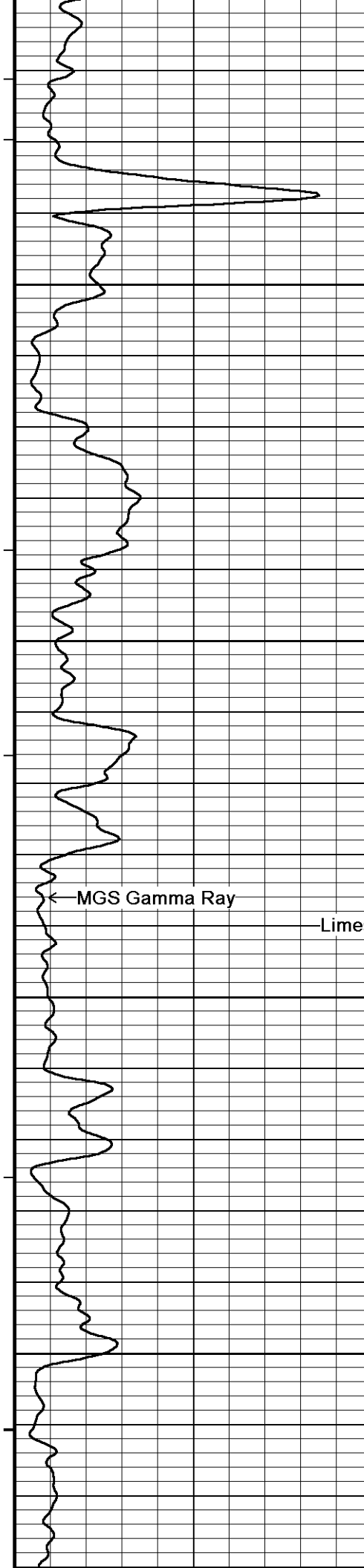
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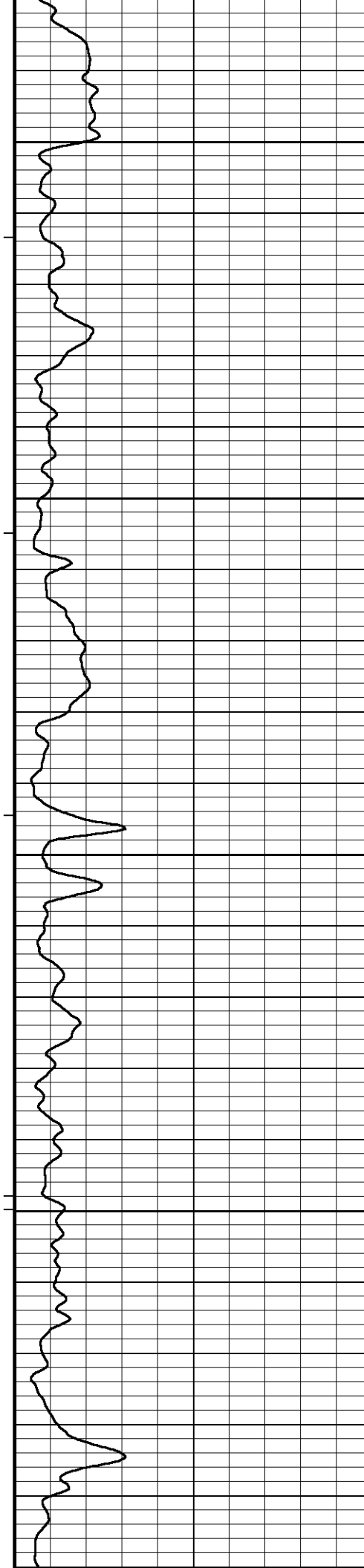
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Recorded on 01-MAR-2013 20:12

System Versions: Processed with 13.03.7594 Plotted with 13.03.7594







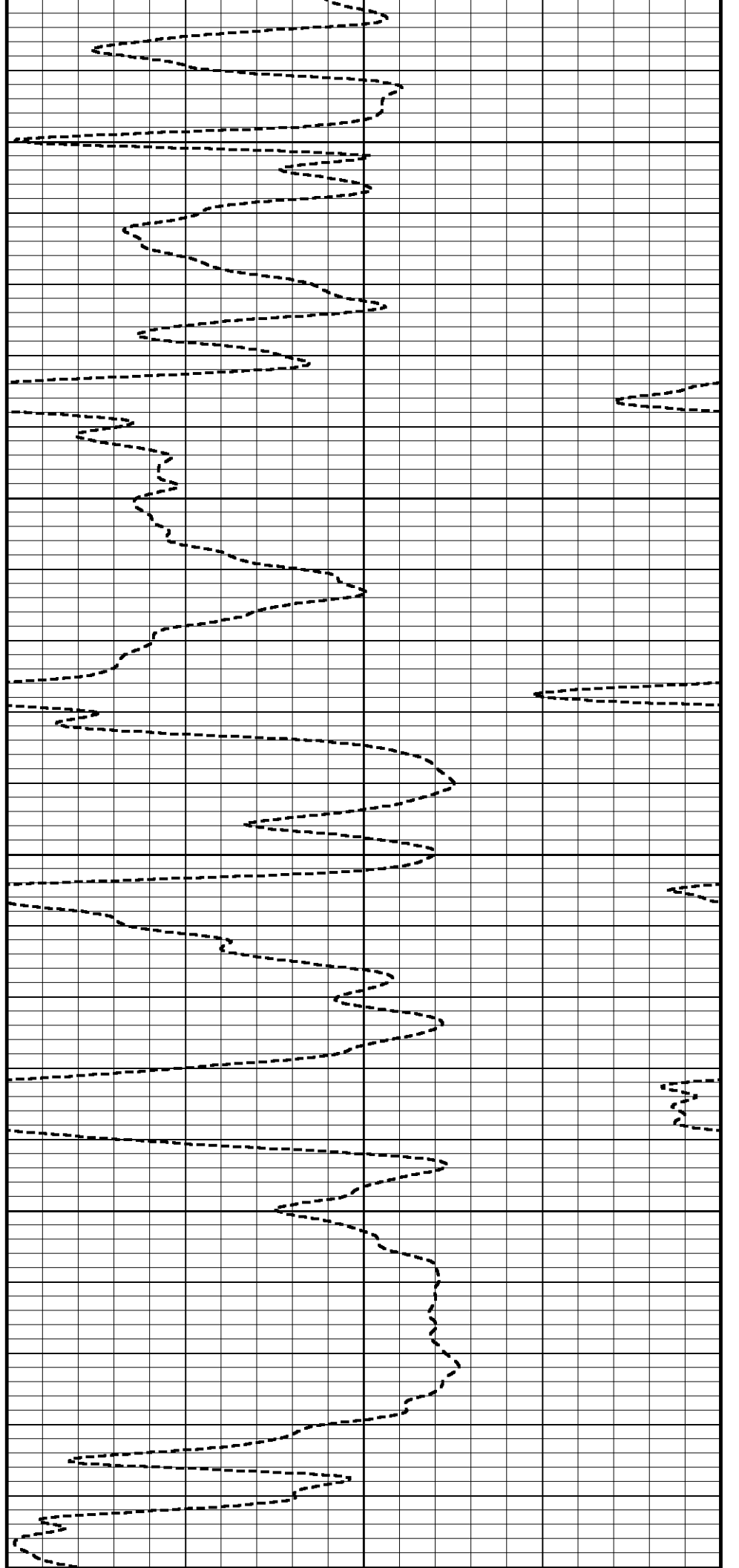
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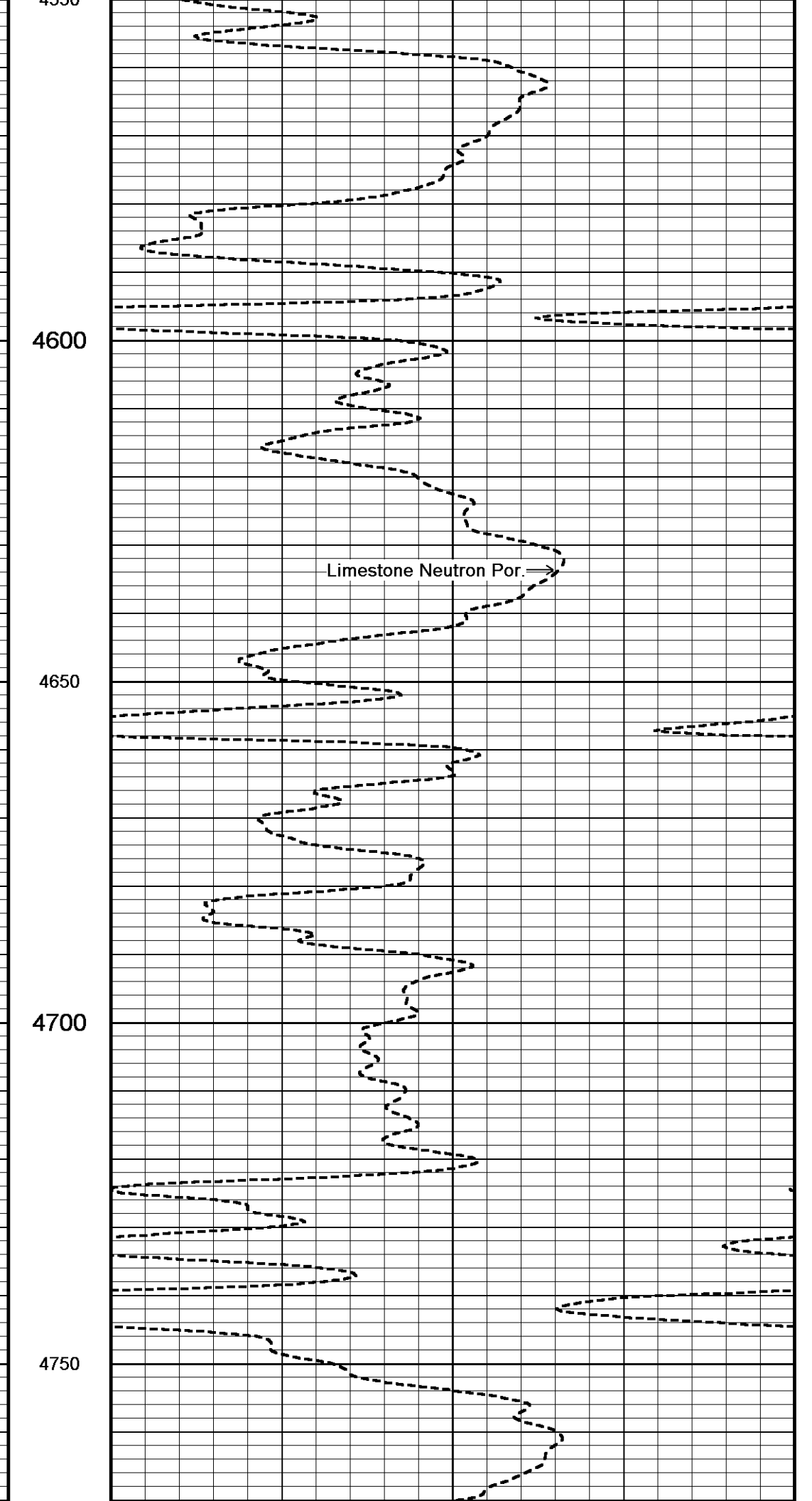
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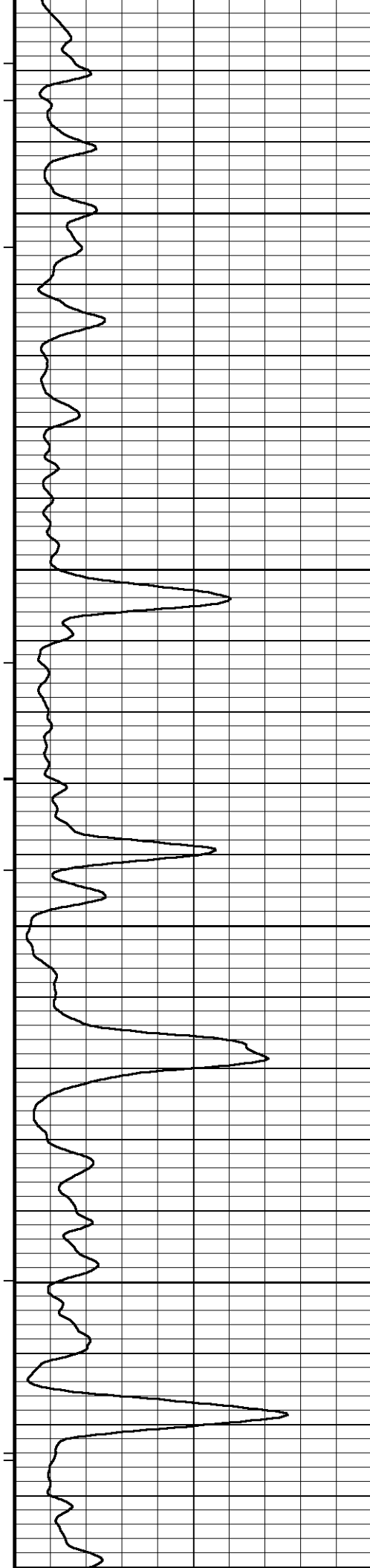
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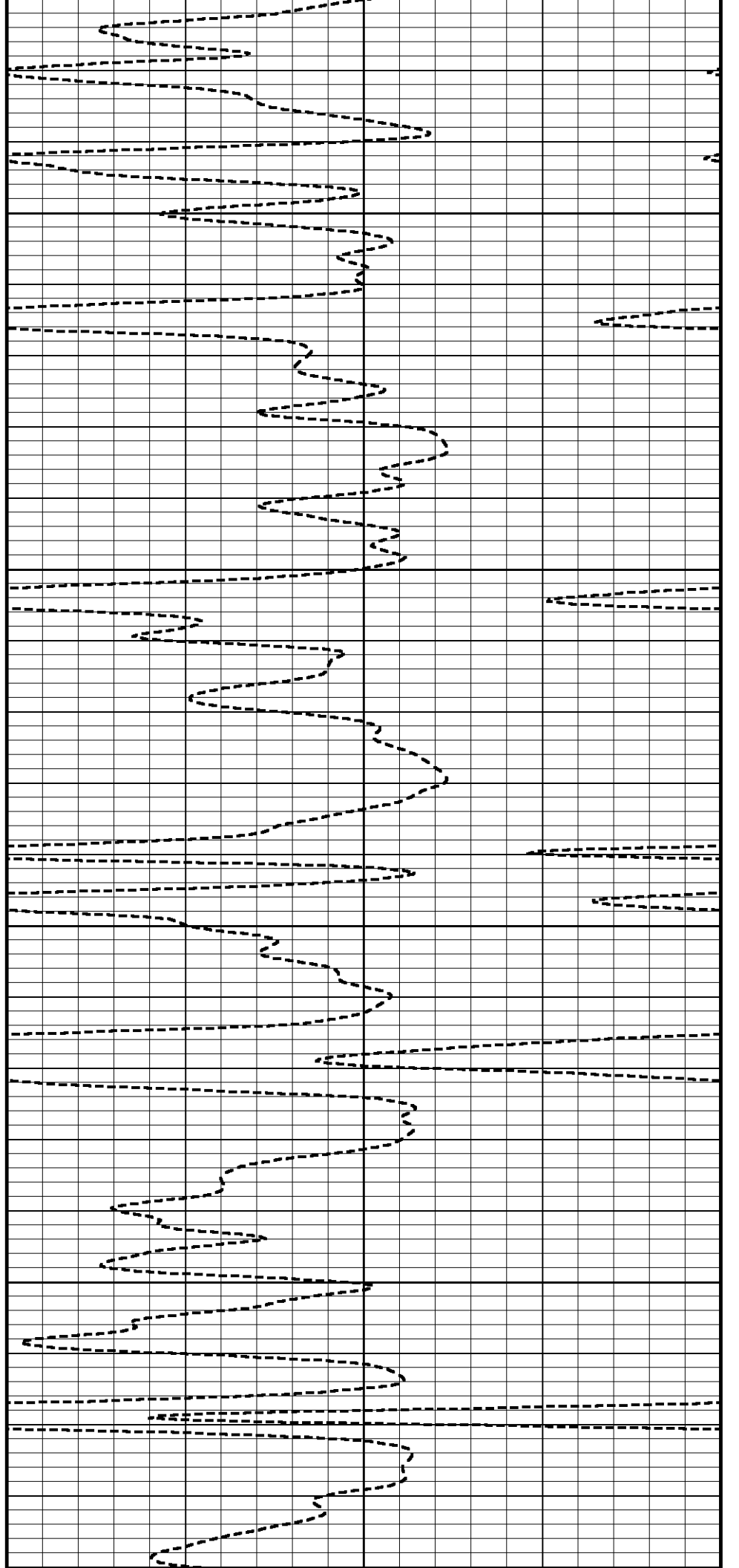


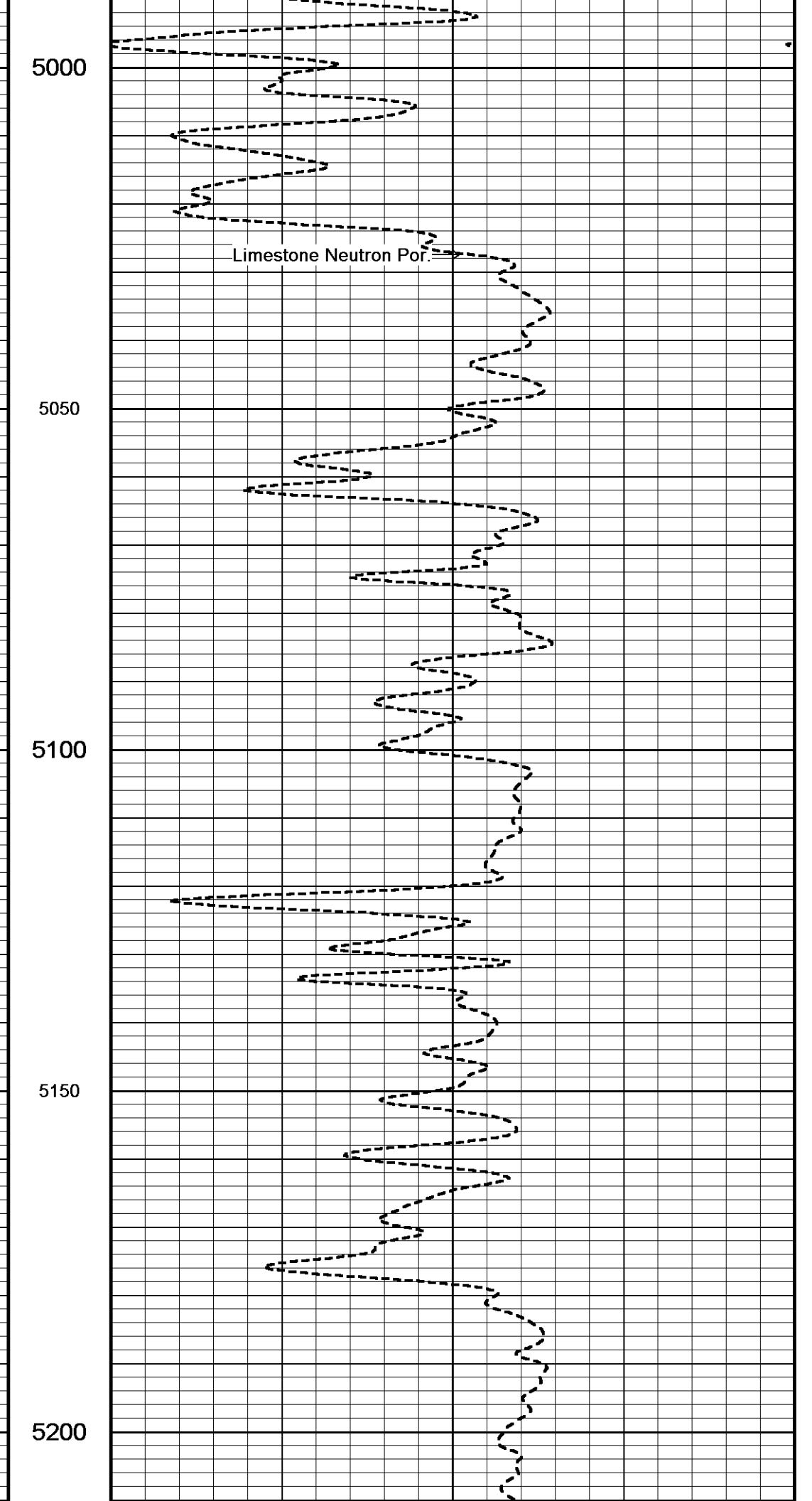
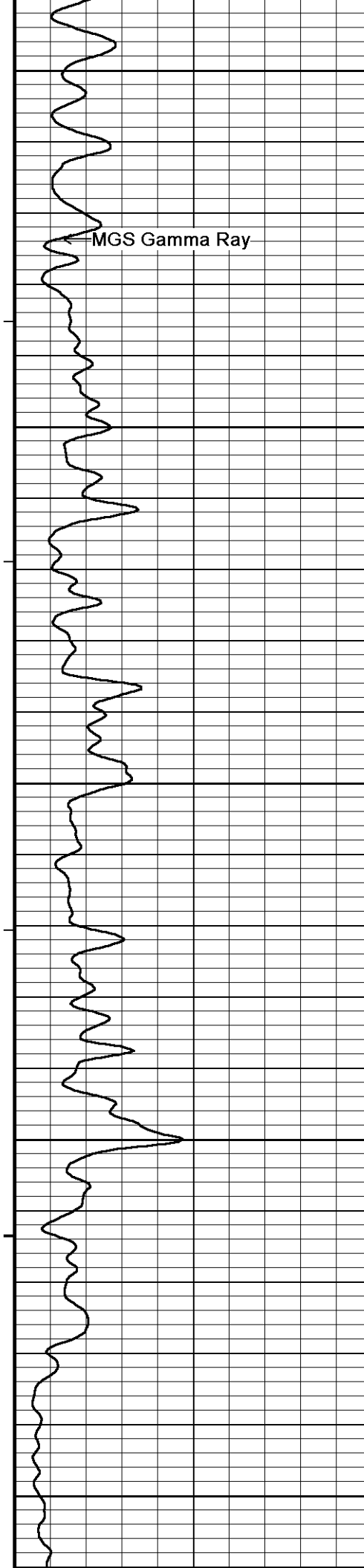
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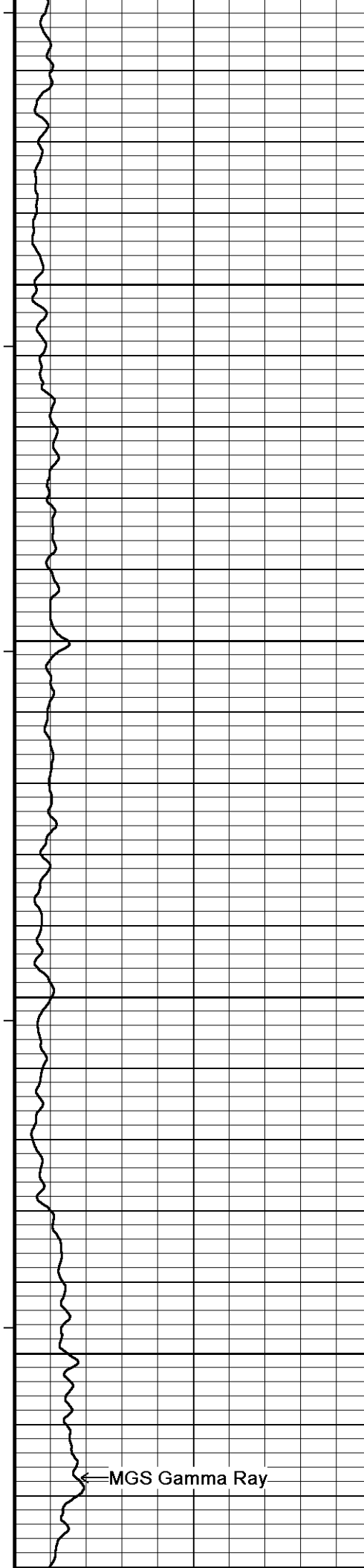
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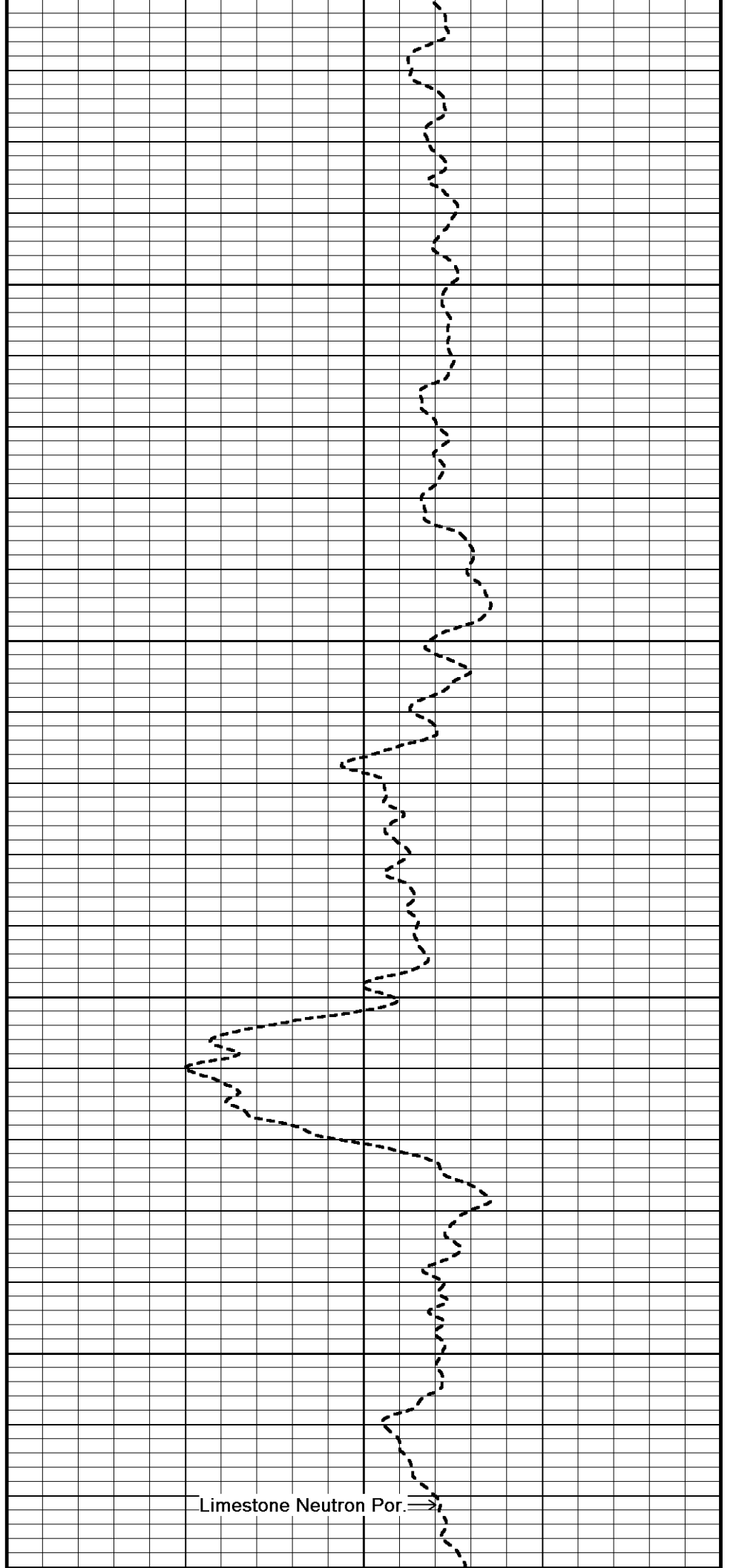
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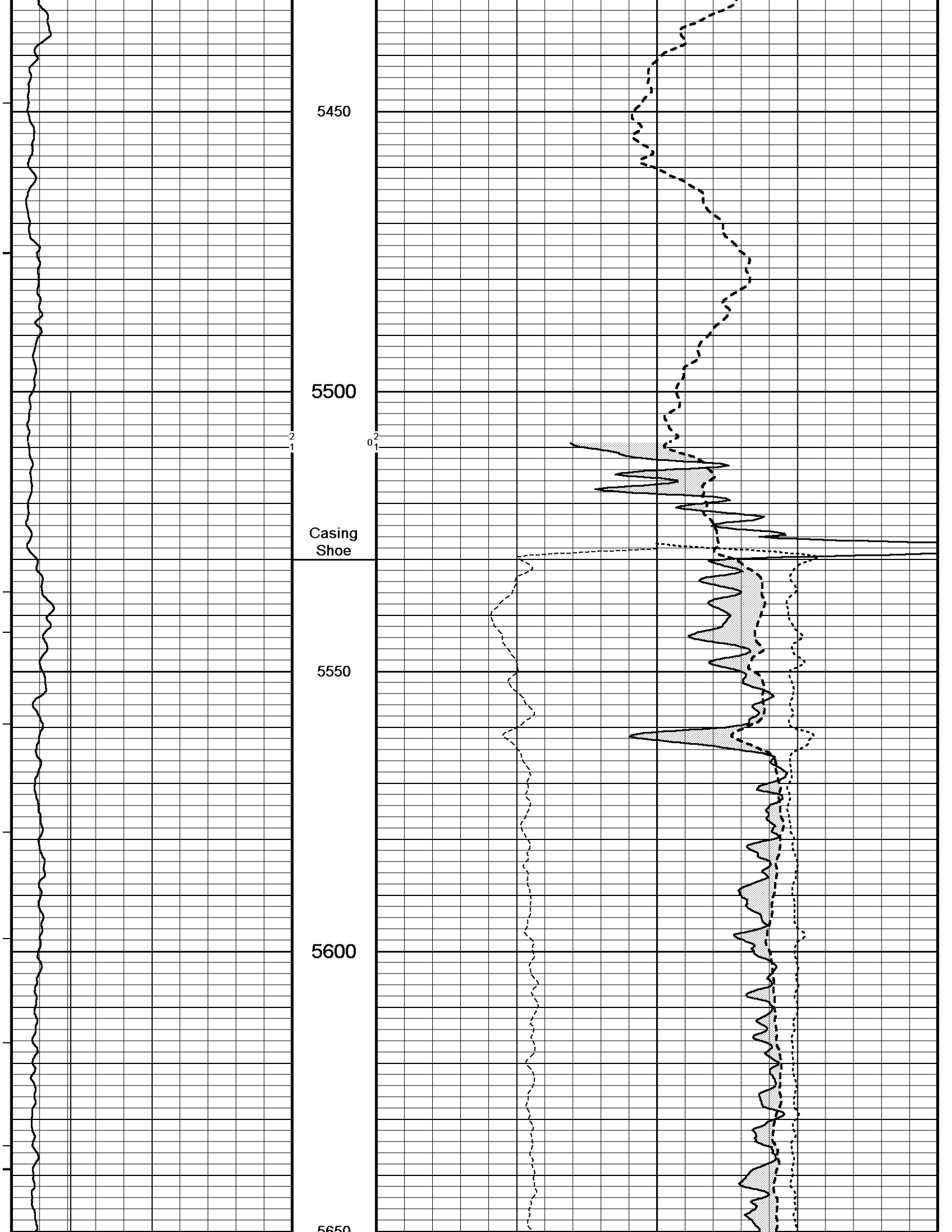
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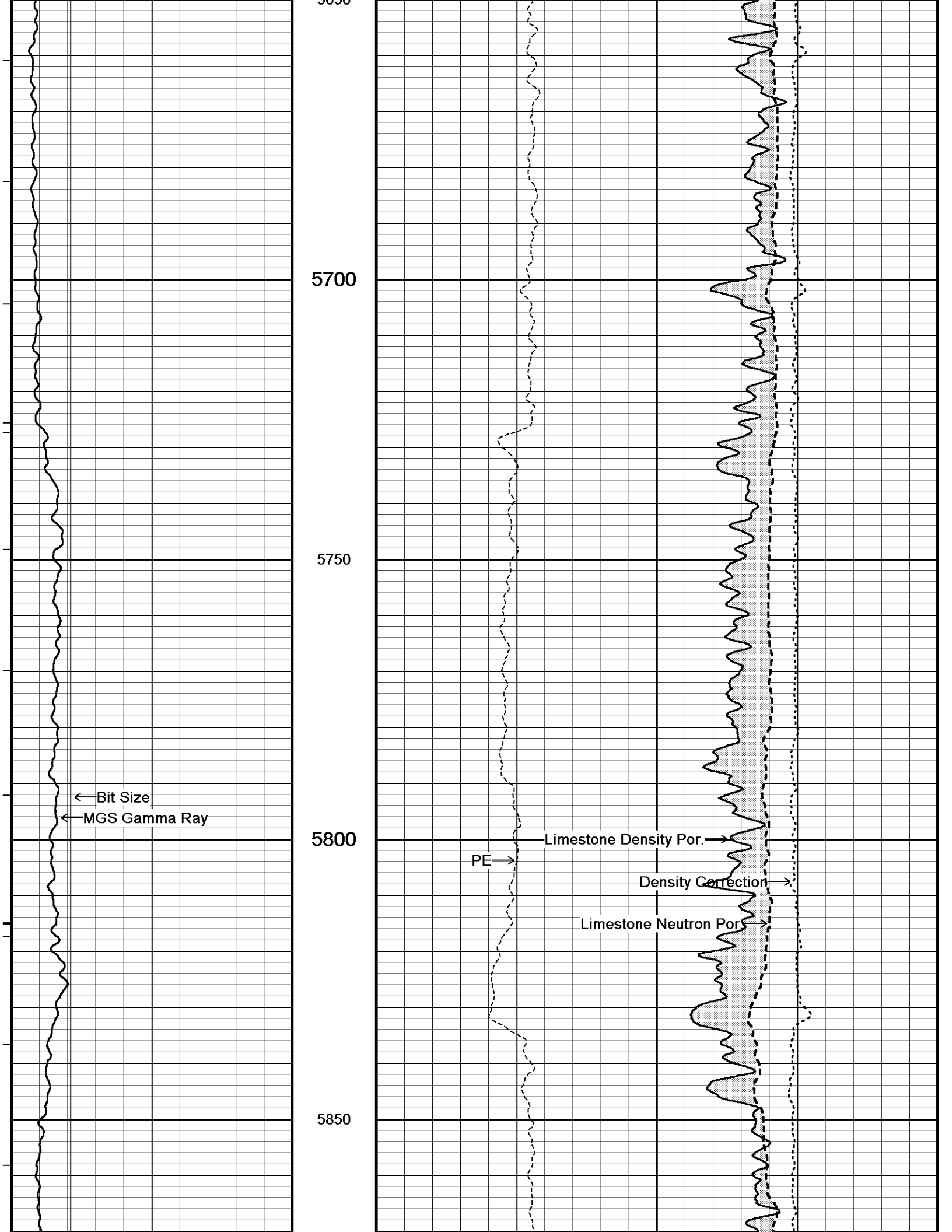
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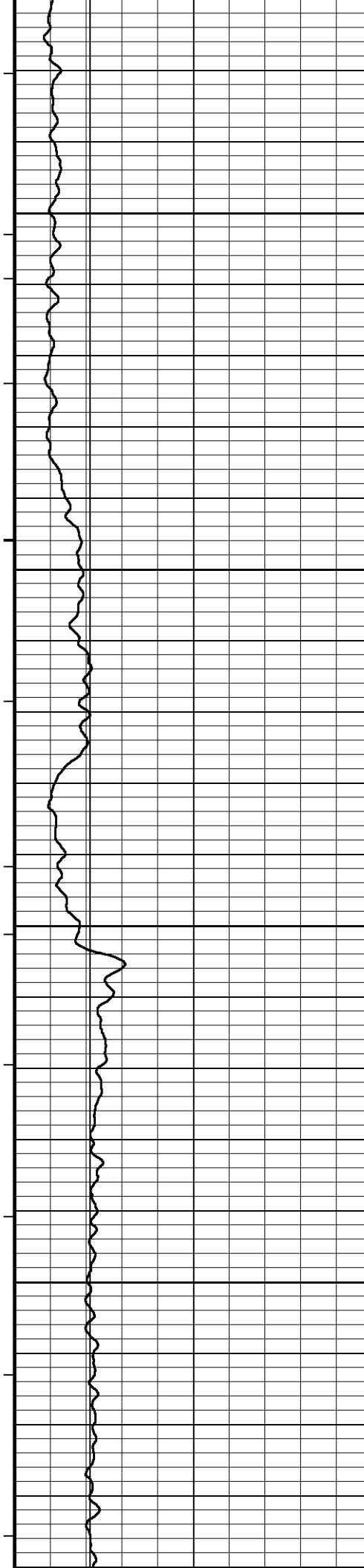
← MGS Gamma Ray



Limestone Neutron Por. →





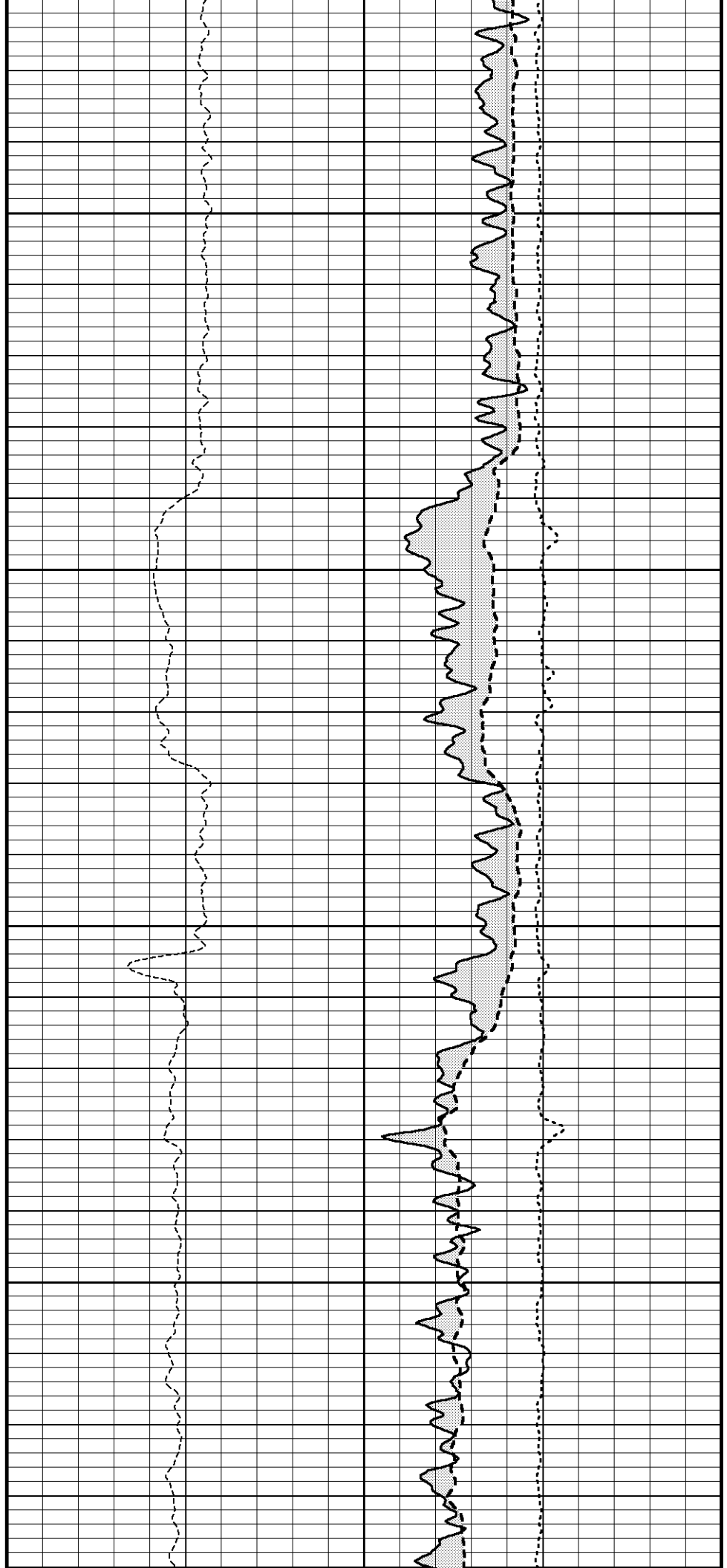


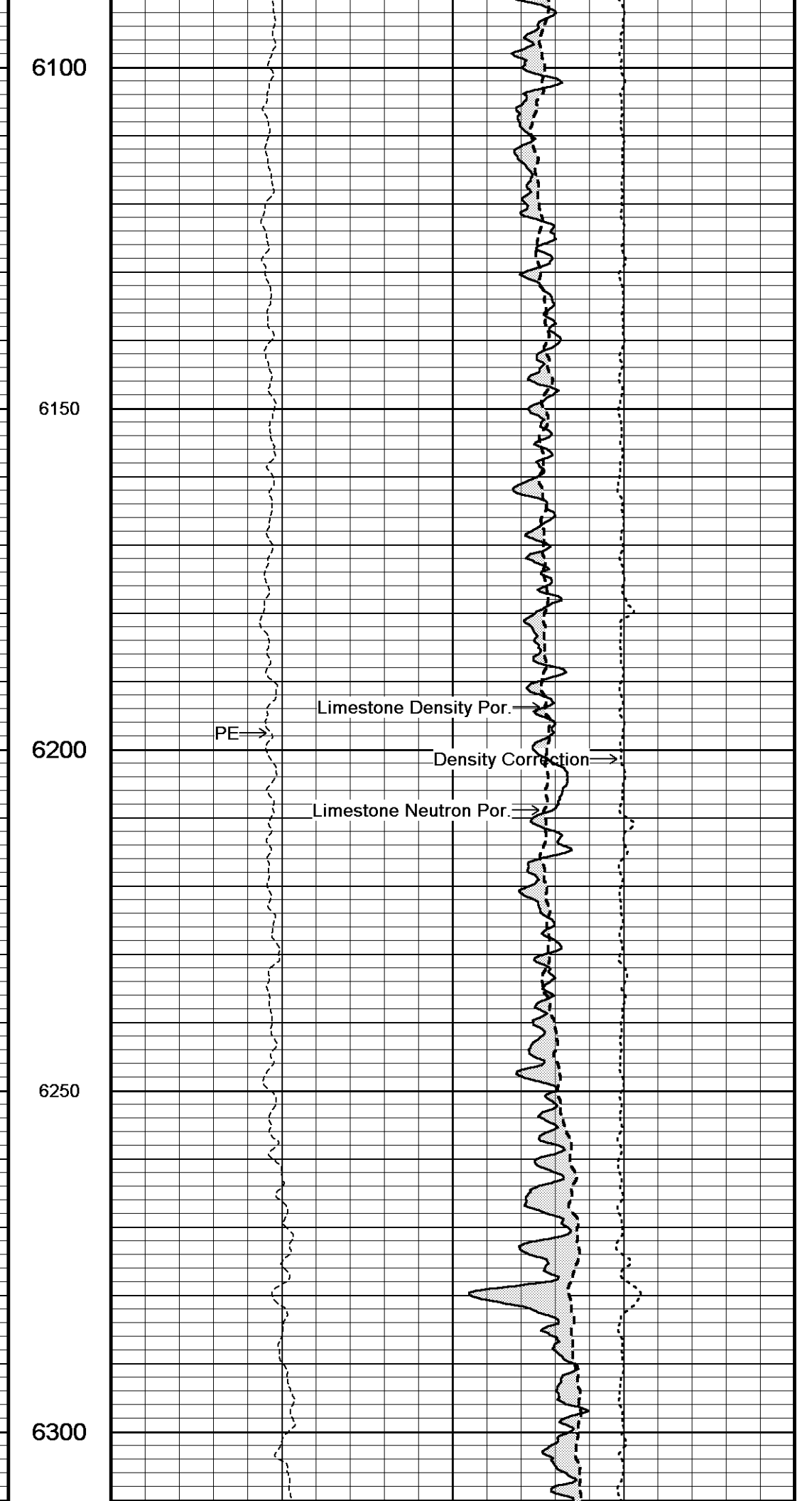
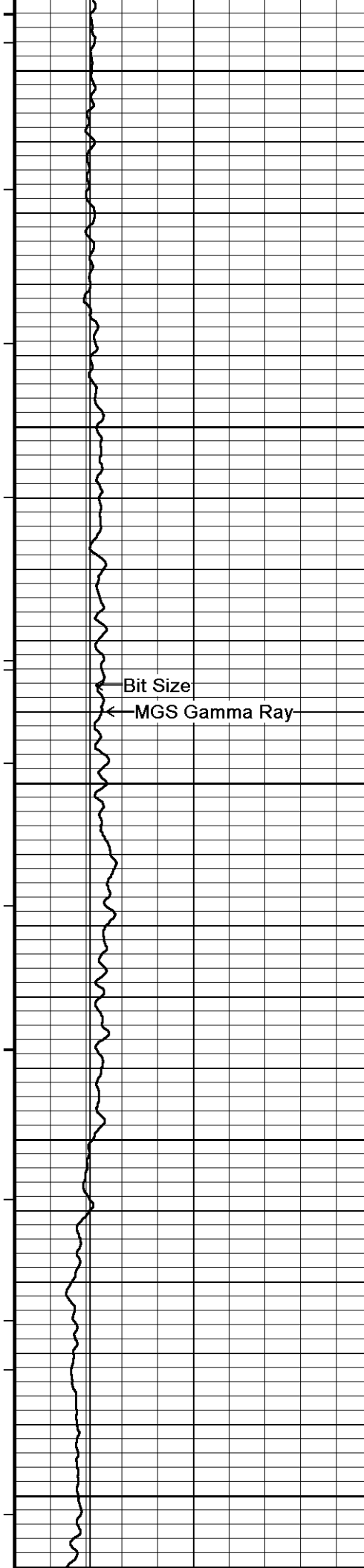
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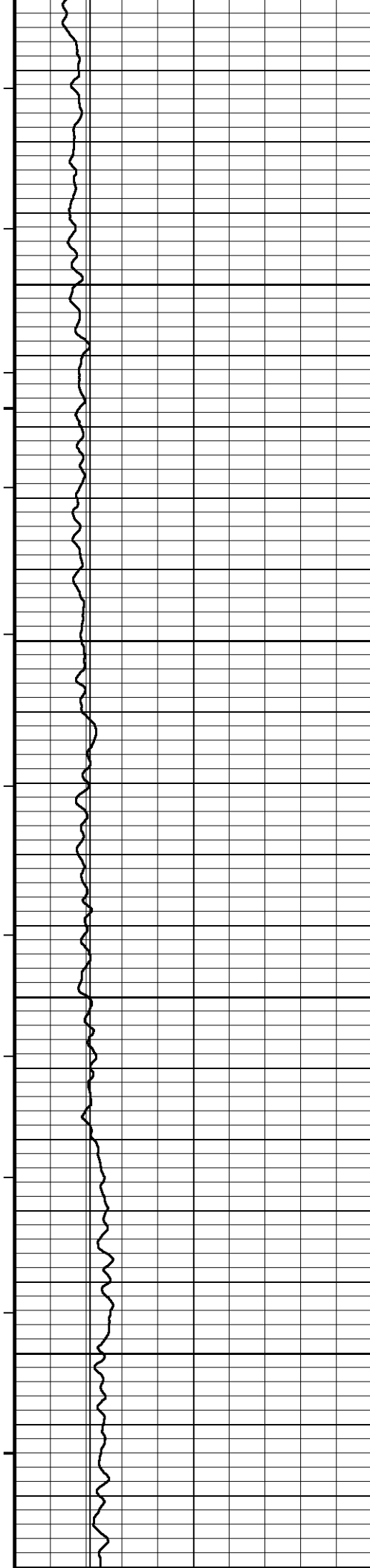
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6150

6200

6250

6300

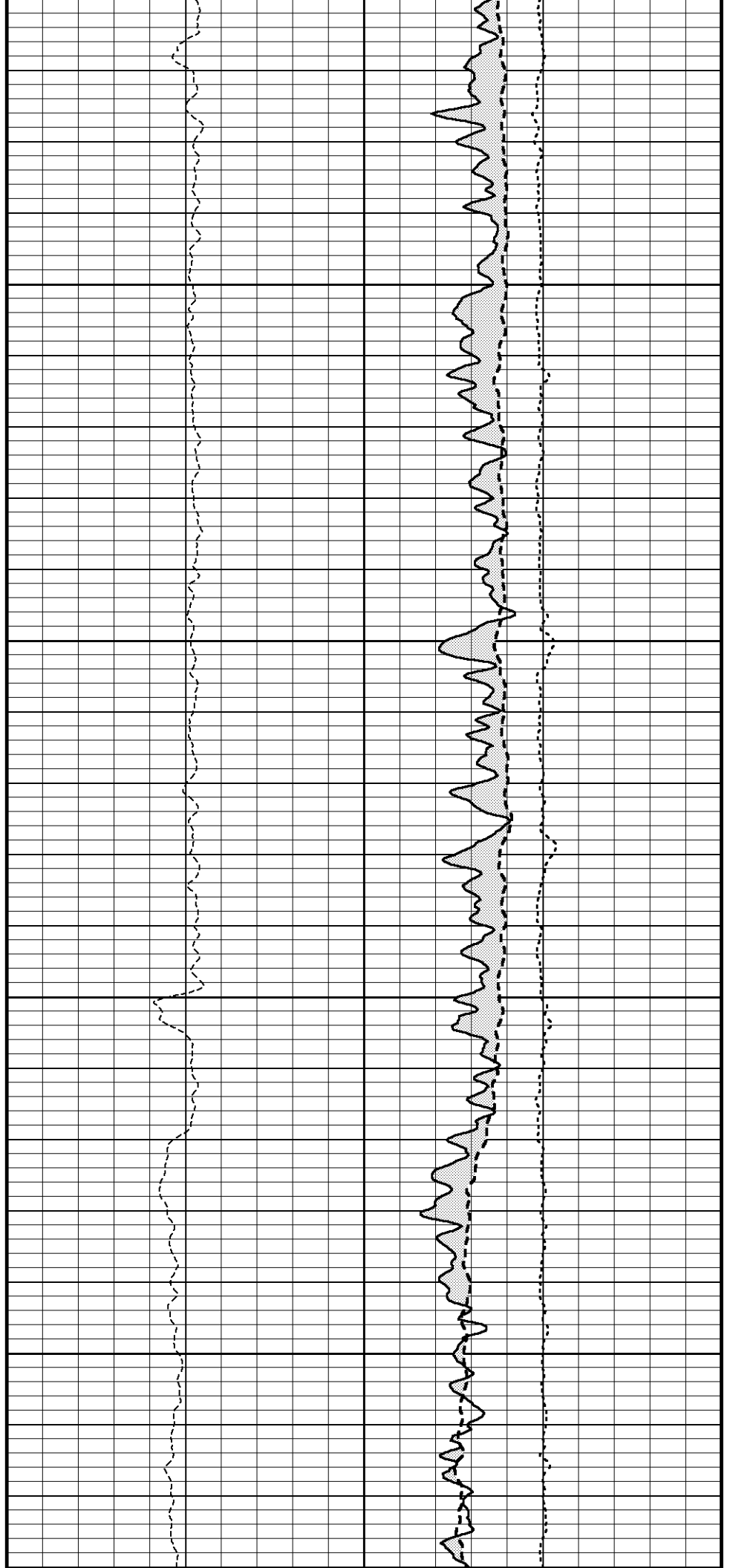


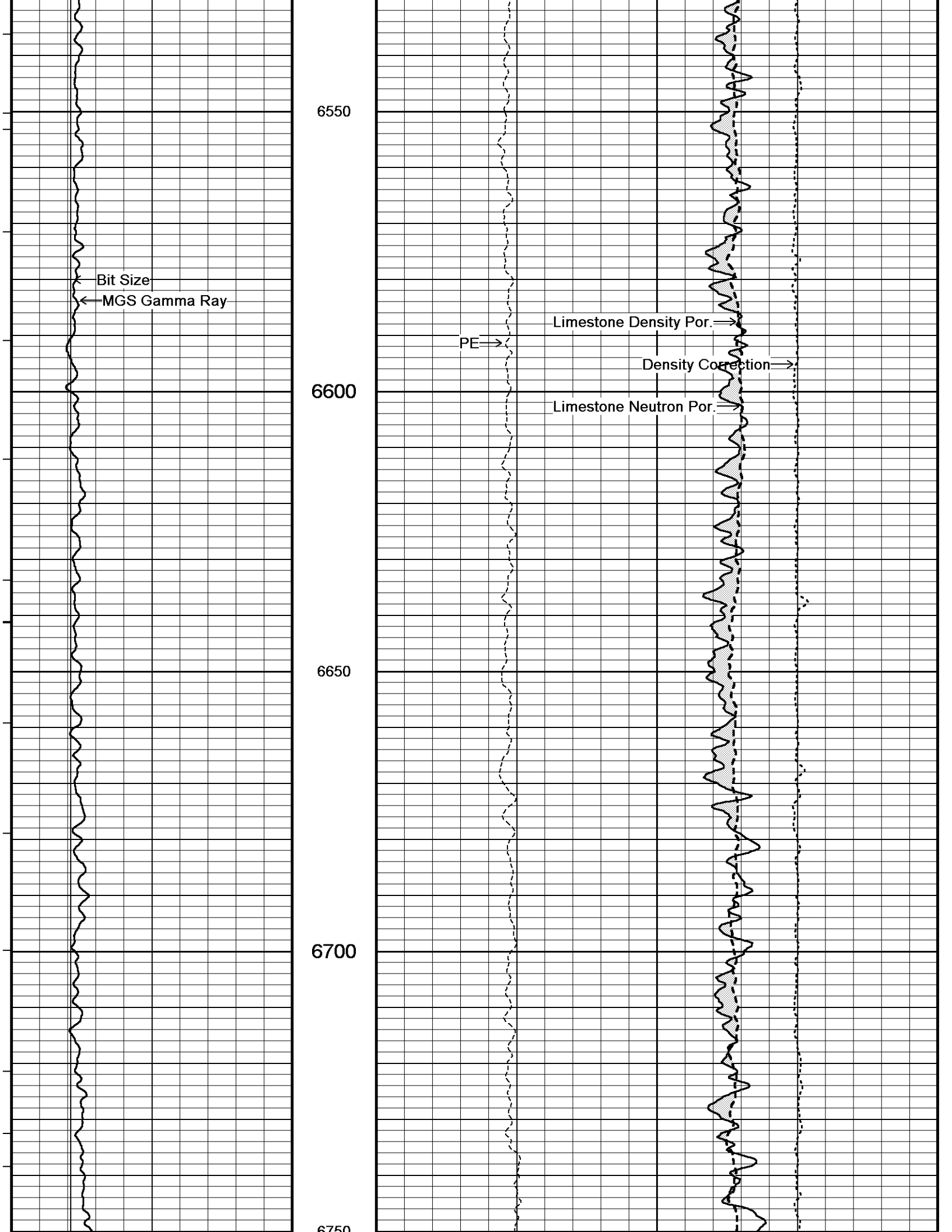
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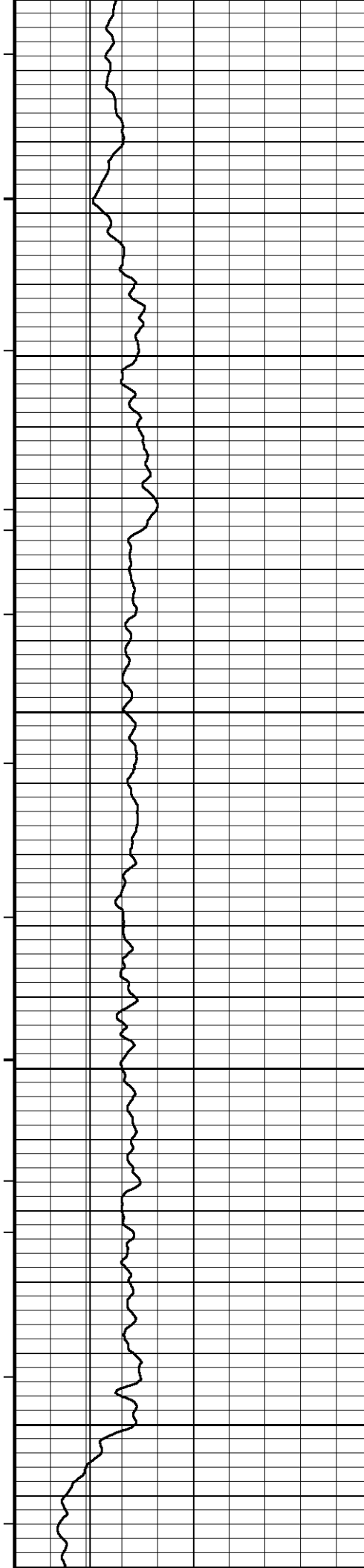
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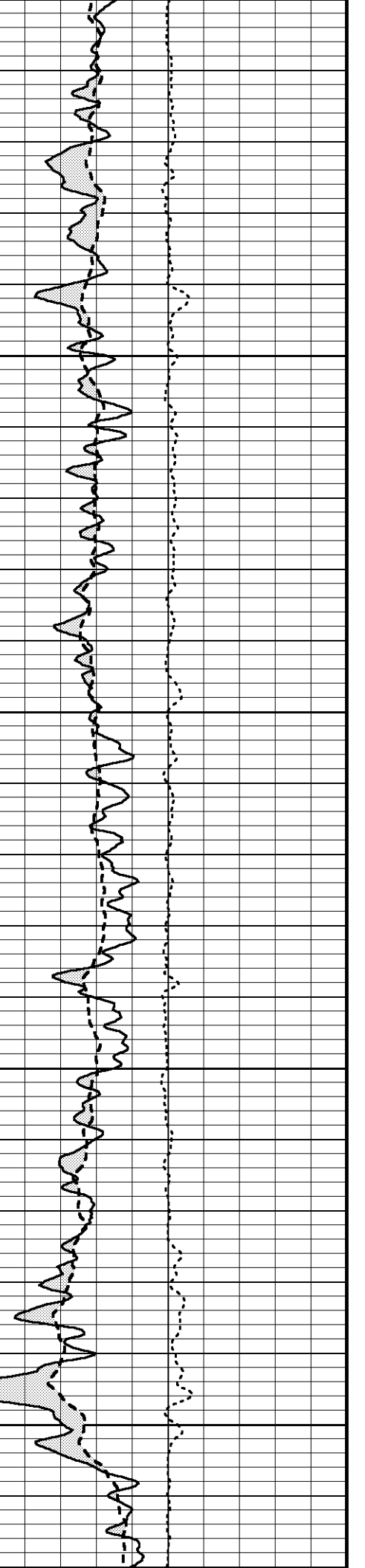
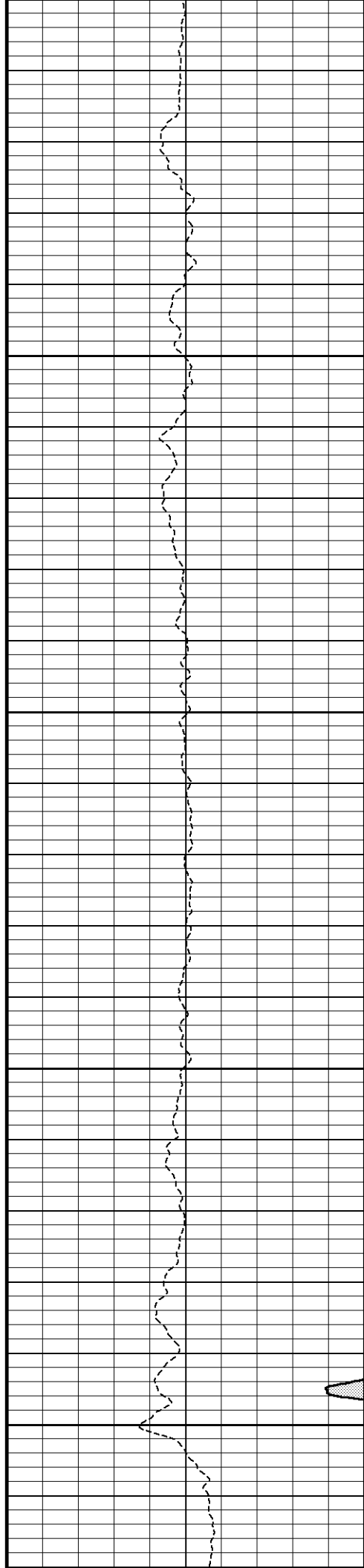
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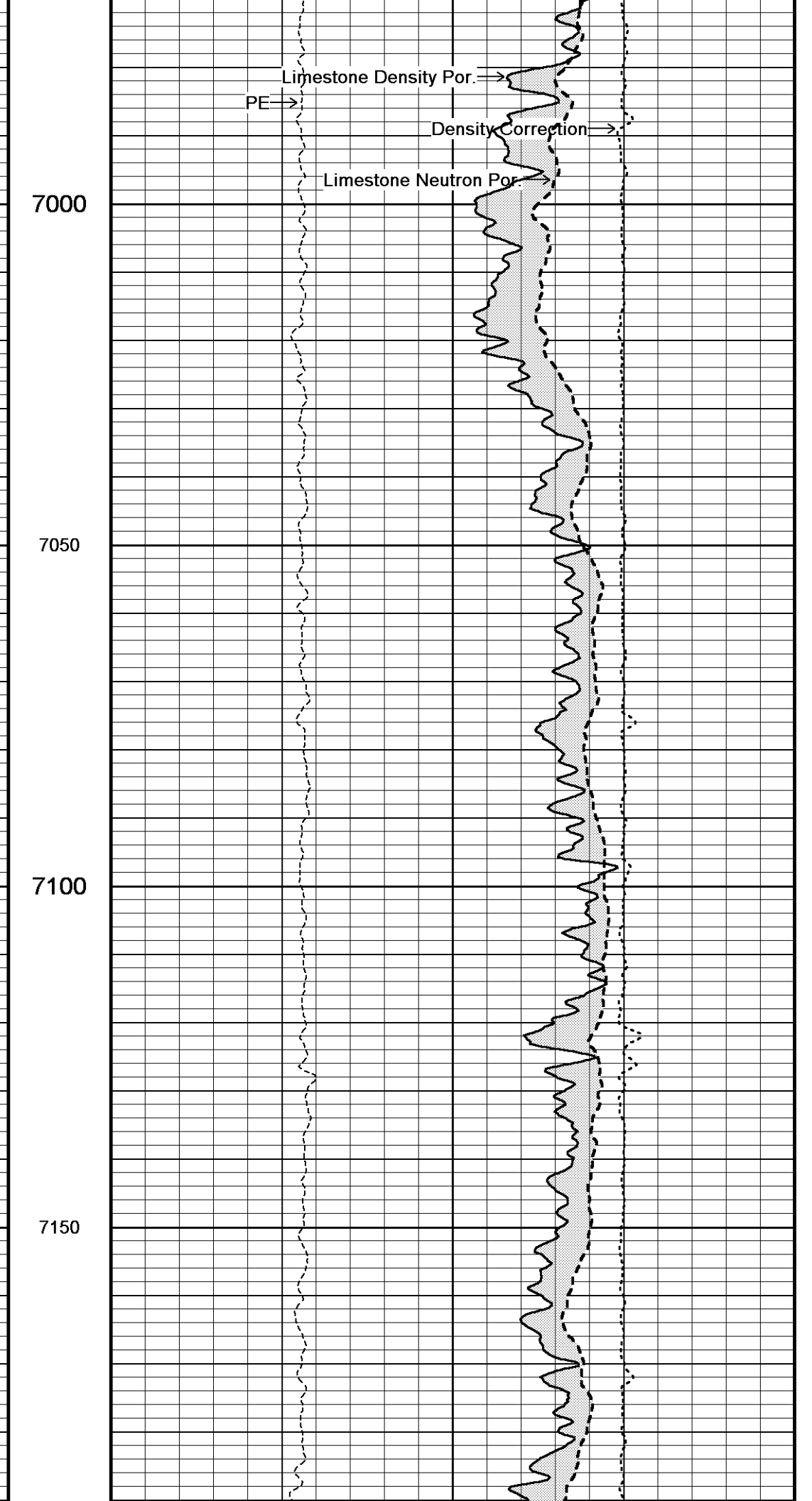
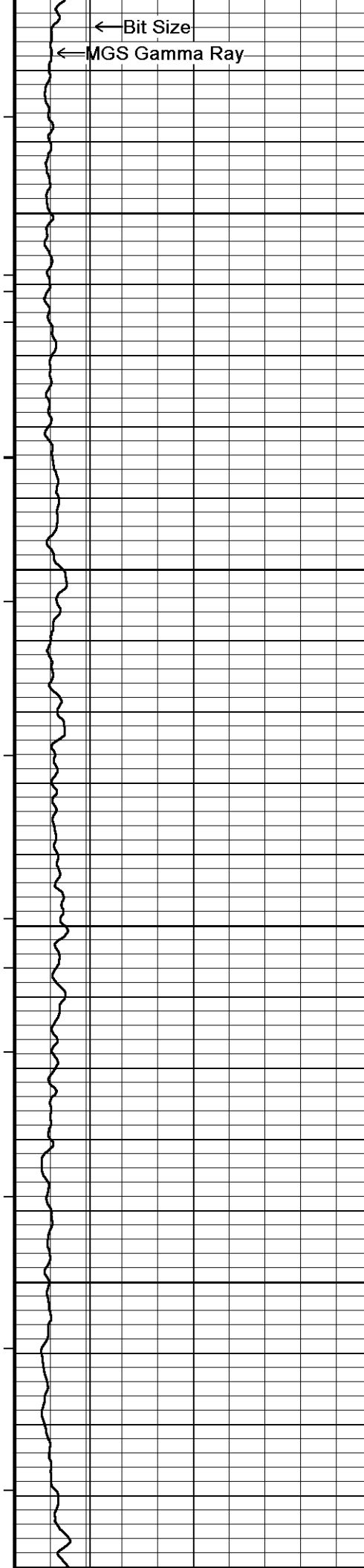


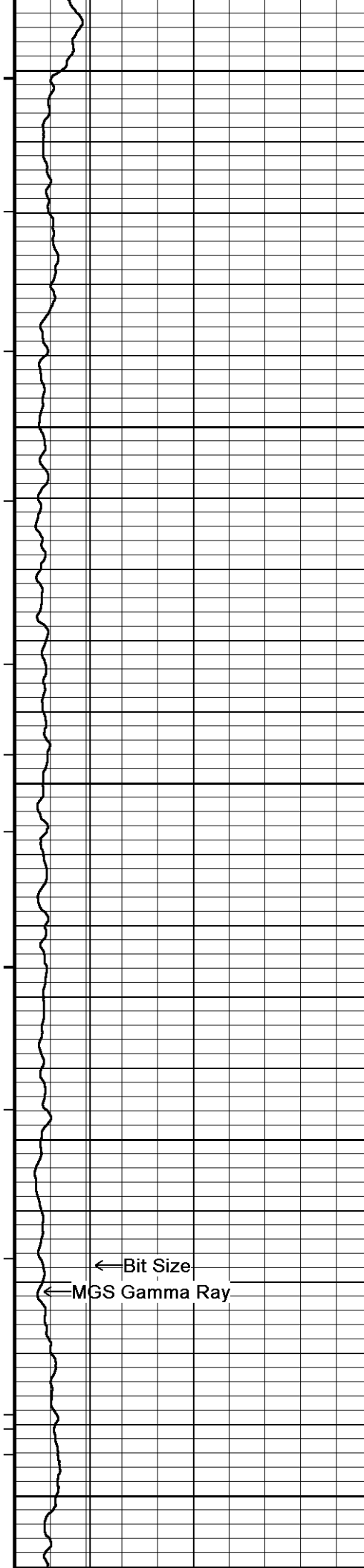




6750  
6800  
6850  
6900  
6950







7200

7250

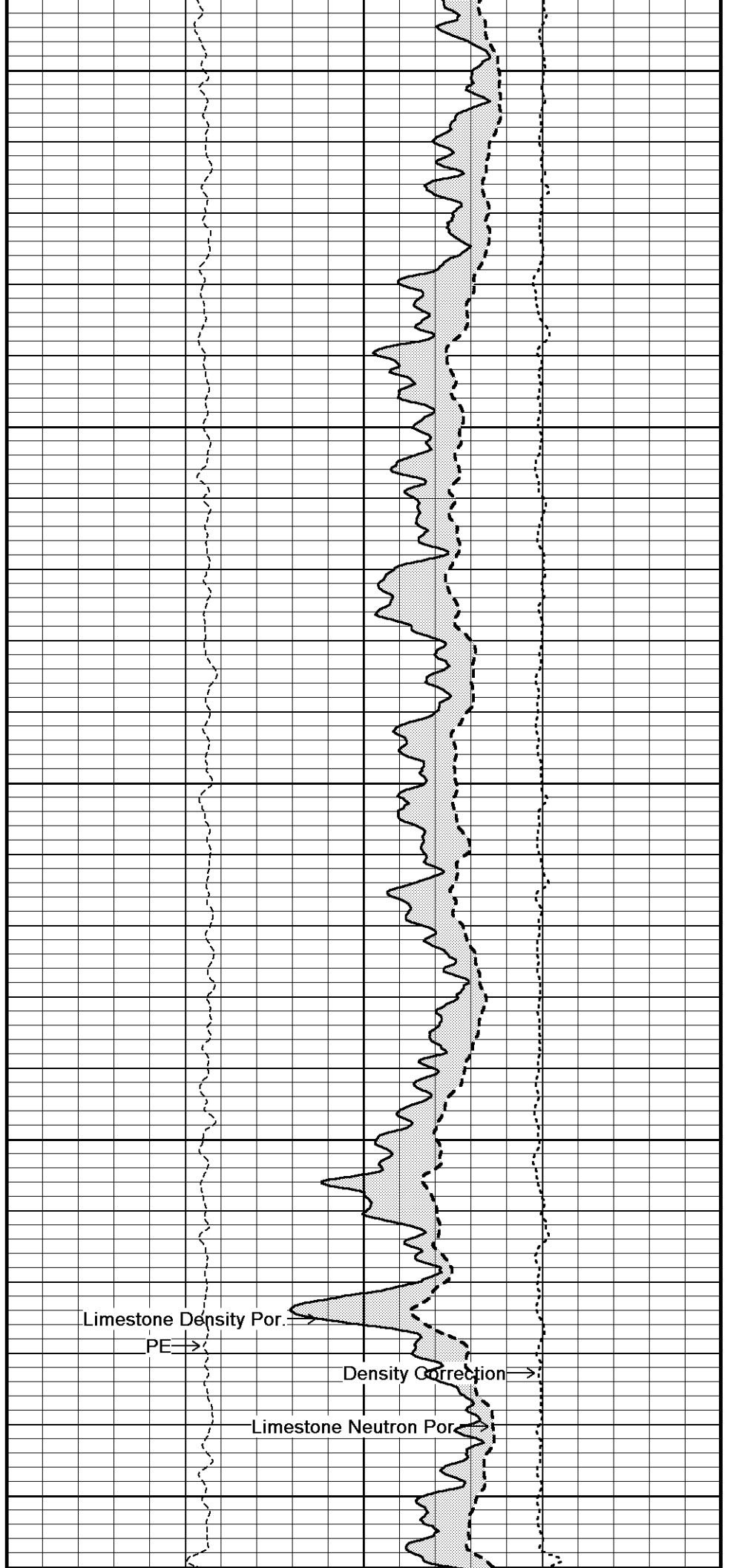
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7400

← Bit Size

← MGS Gamma Ray

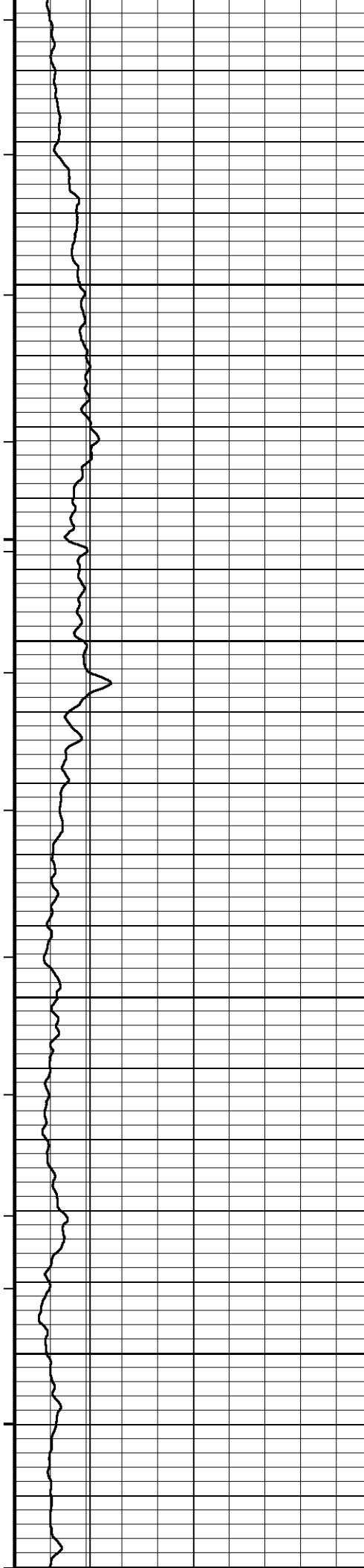


Limestone Density Por. →

PE →

Density Correction →

Limestone Neutron Por.

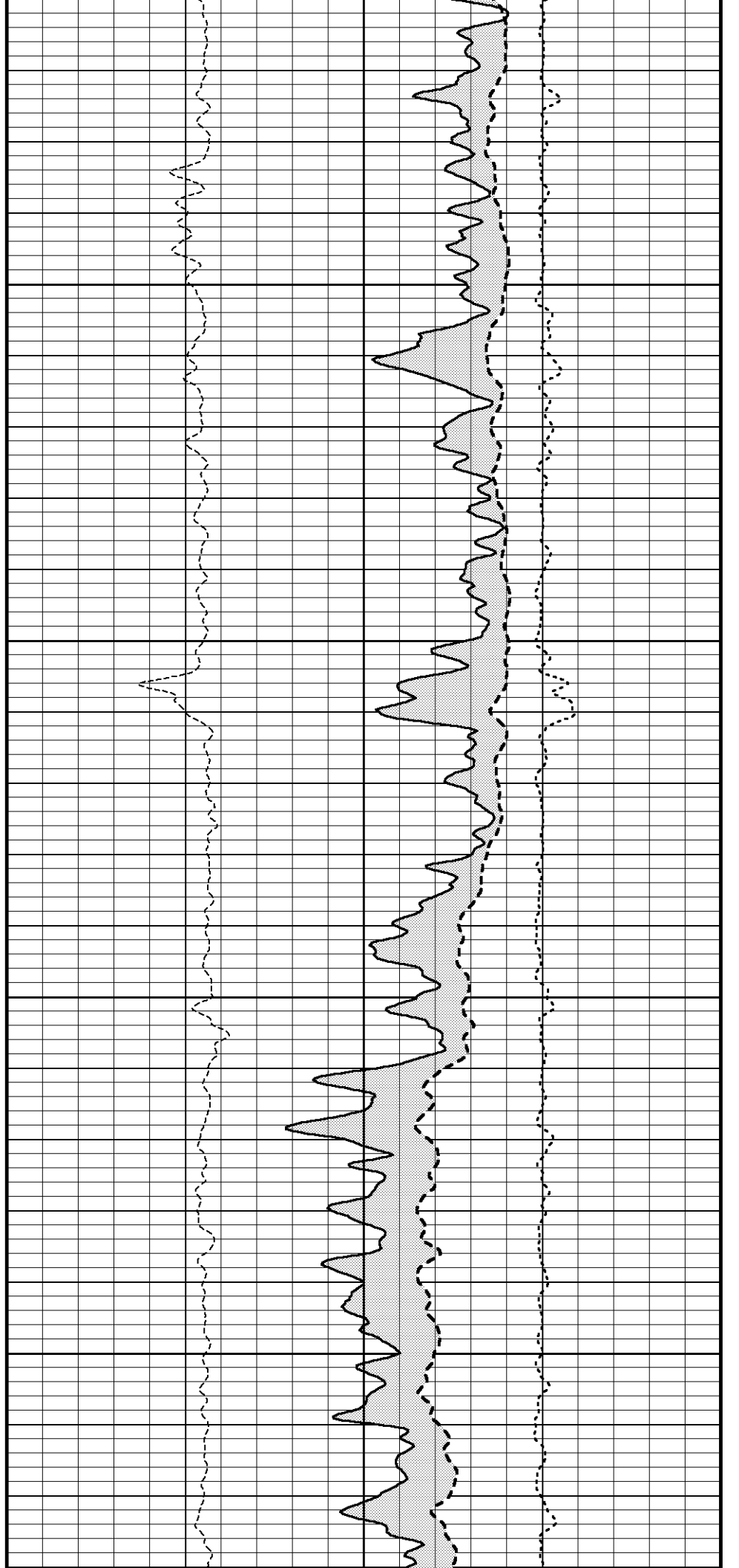


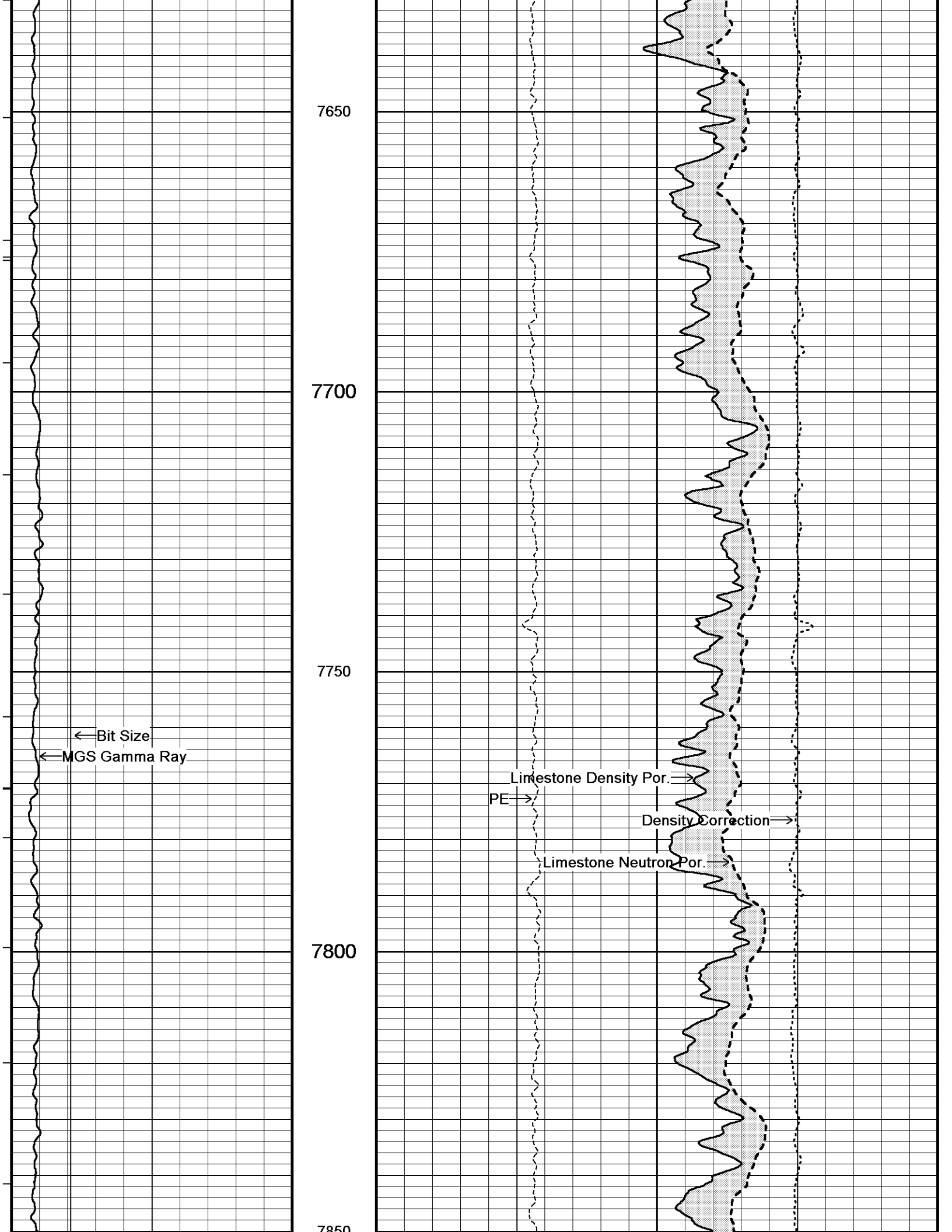
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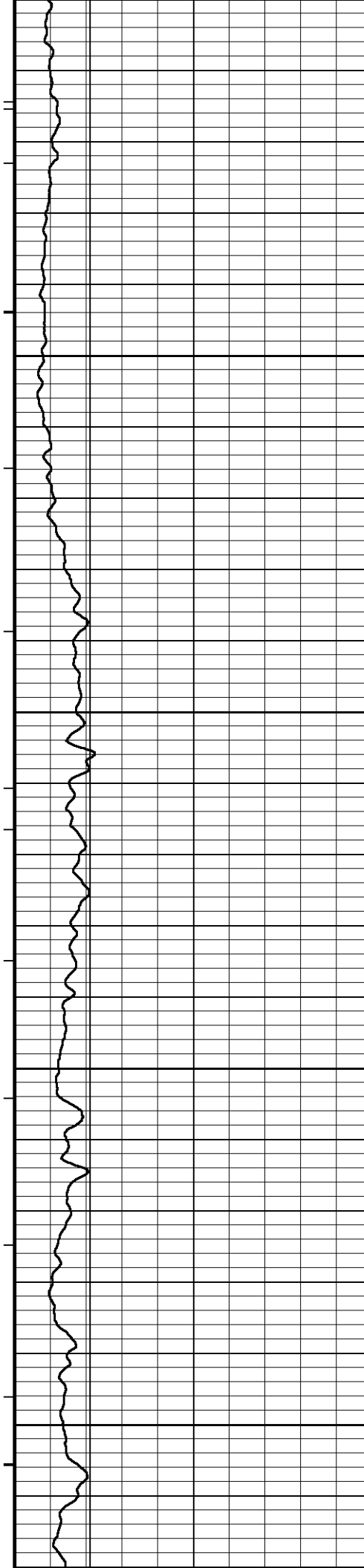
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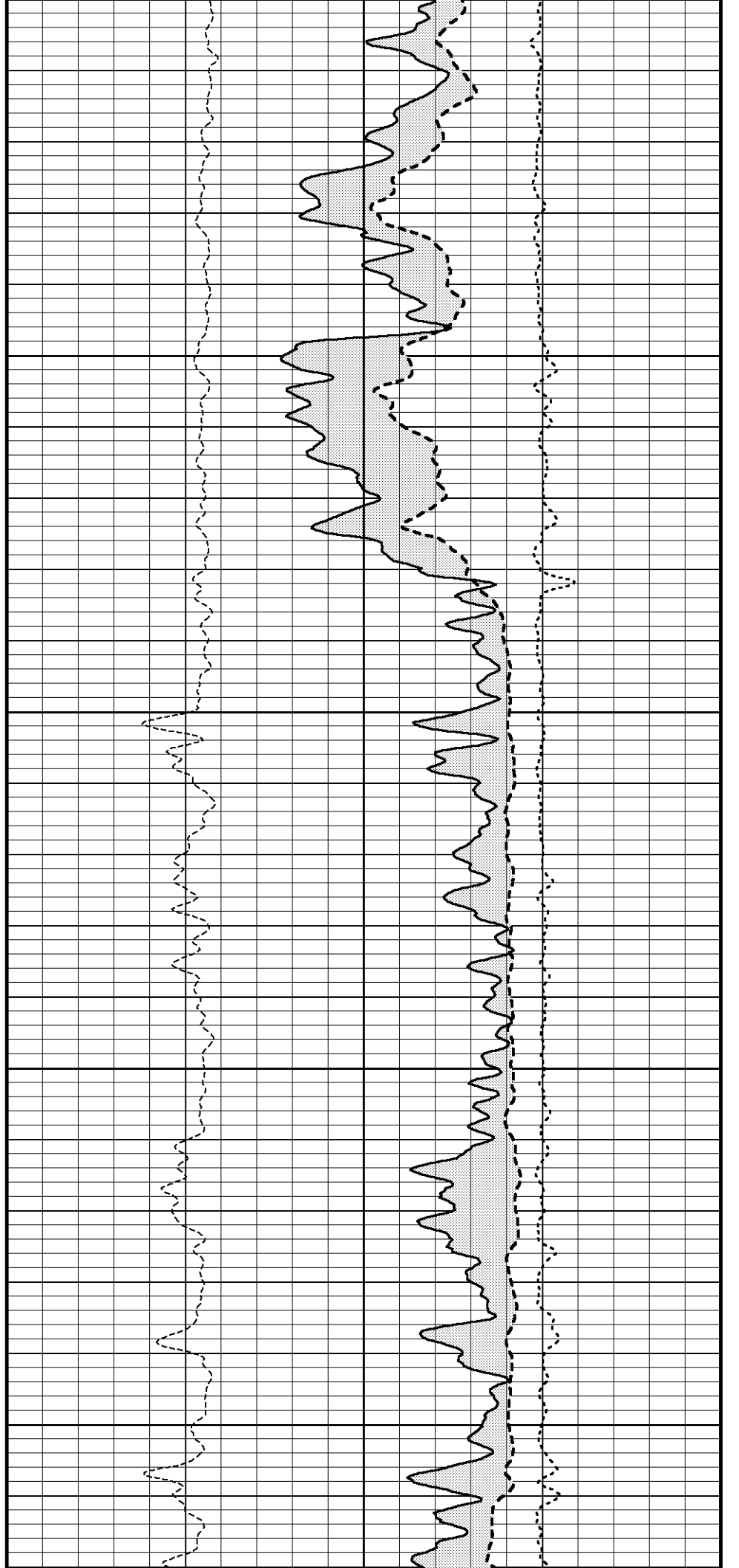
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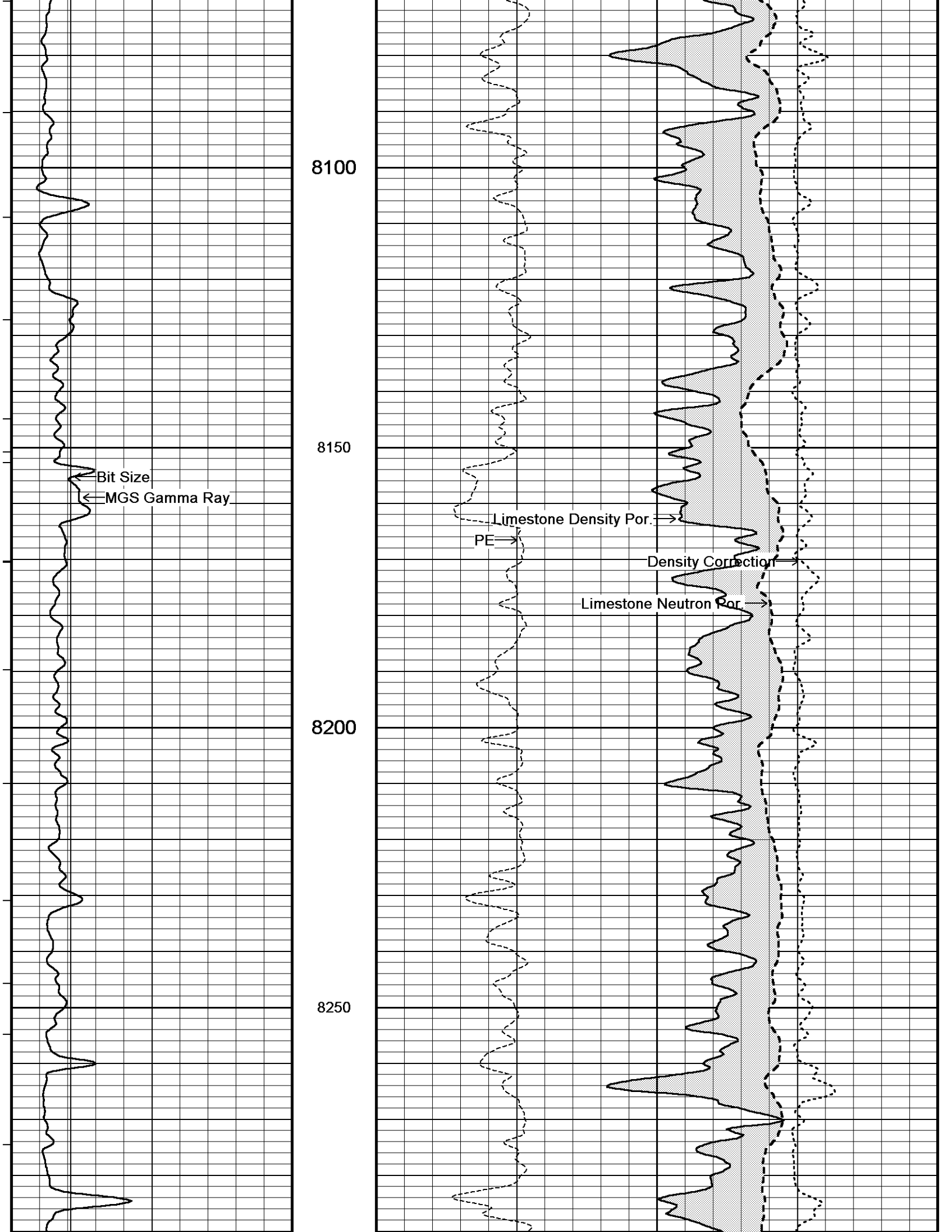


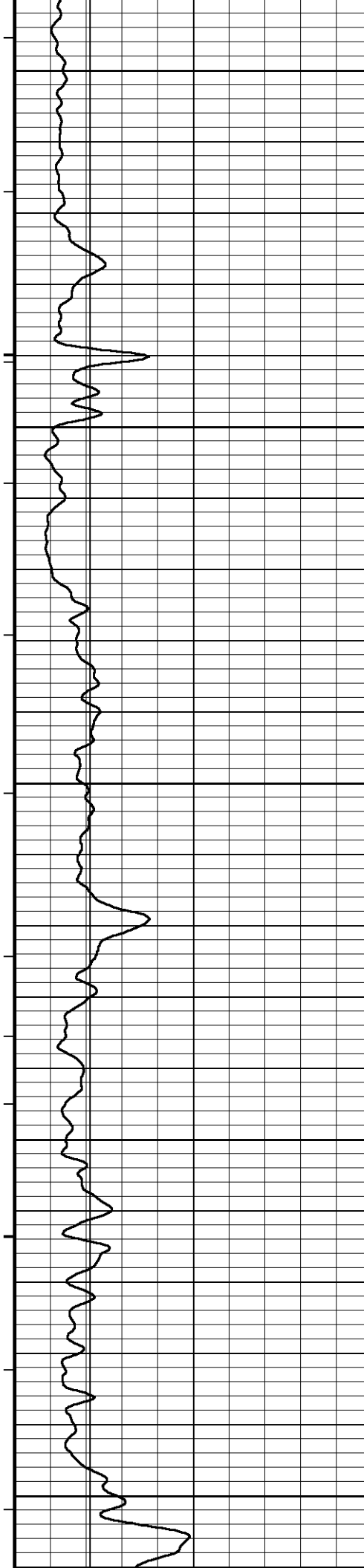




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7900  
7950  
8000  
8050







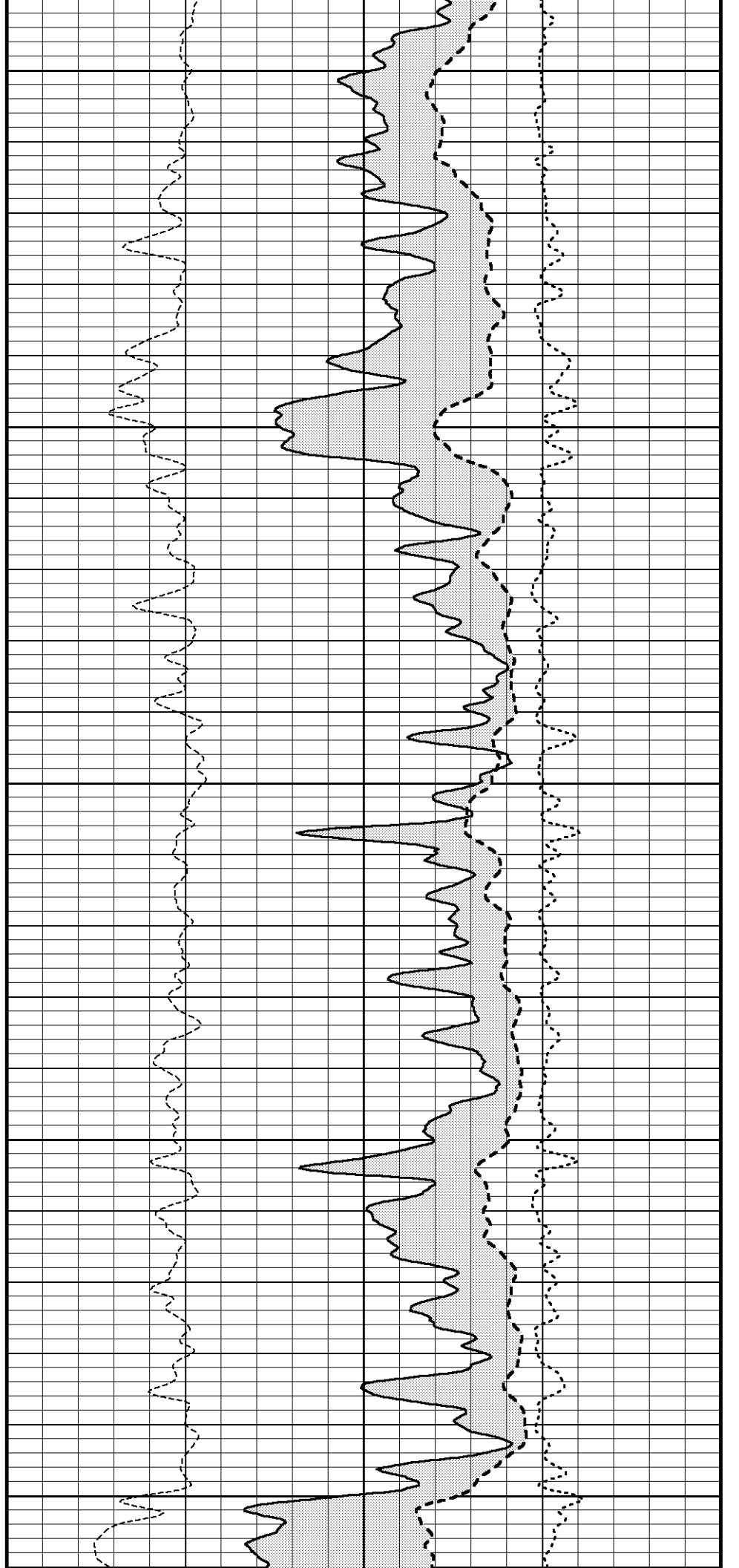
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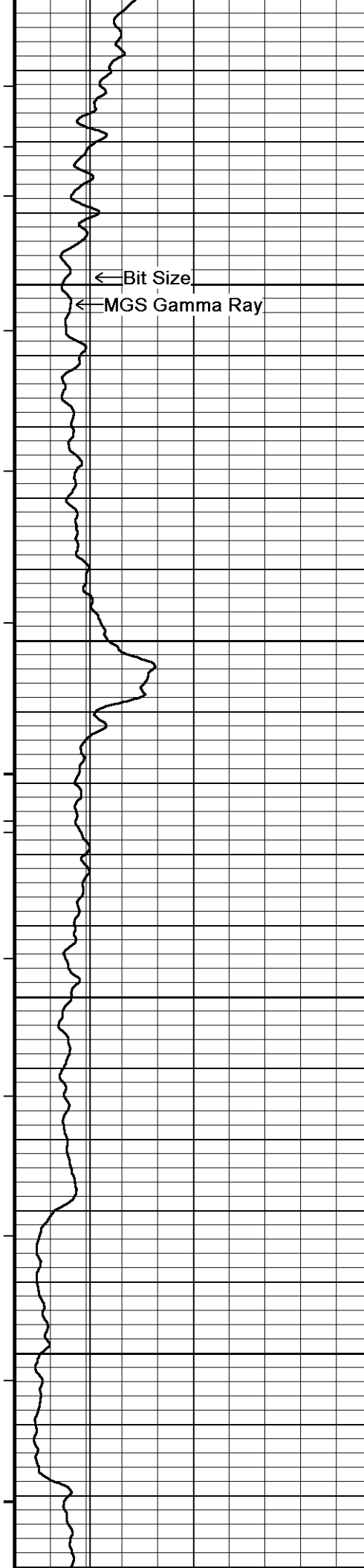
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8500



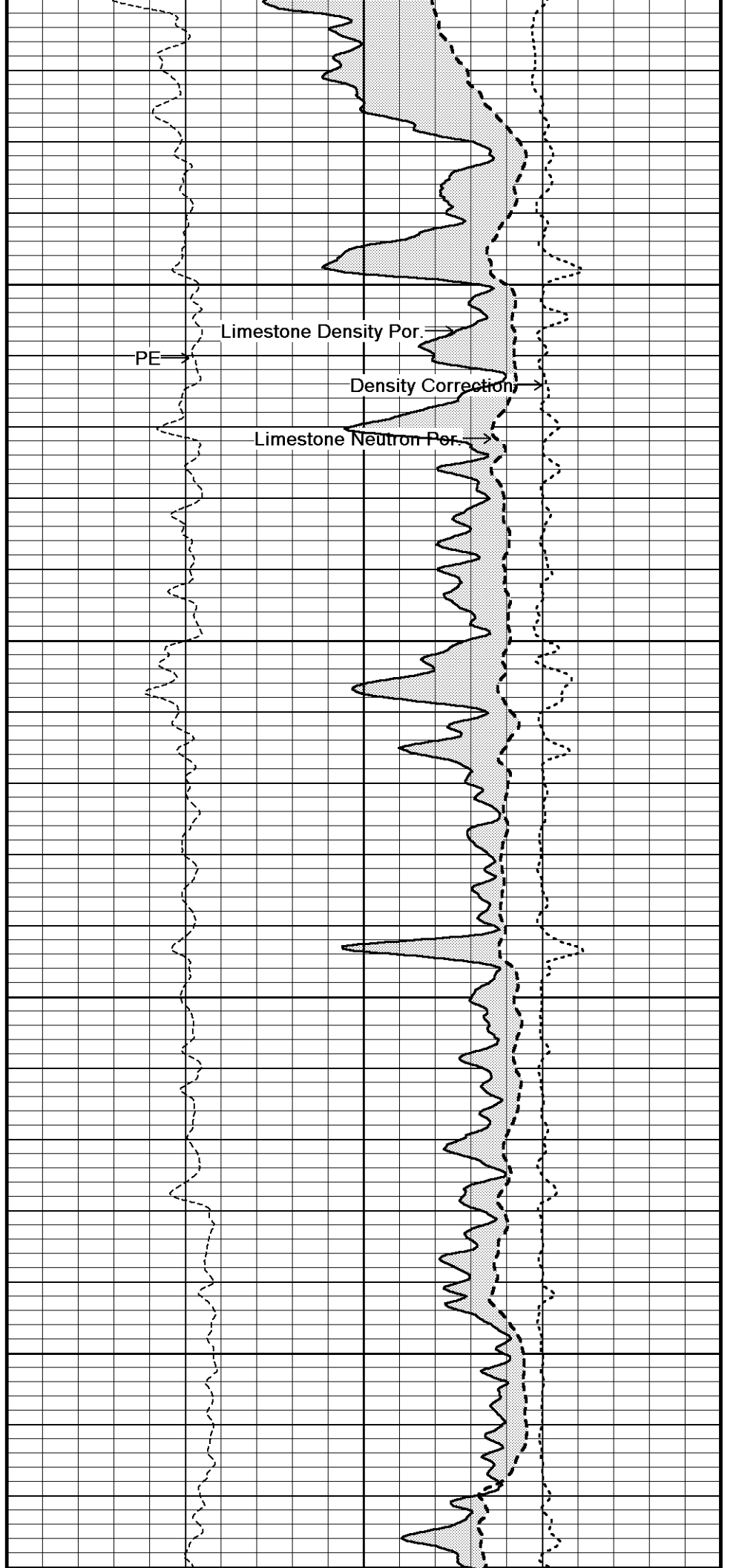


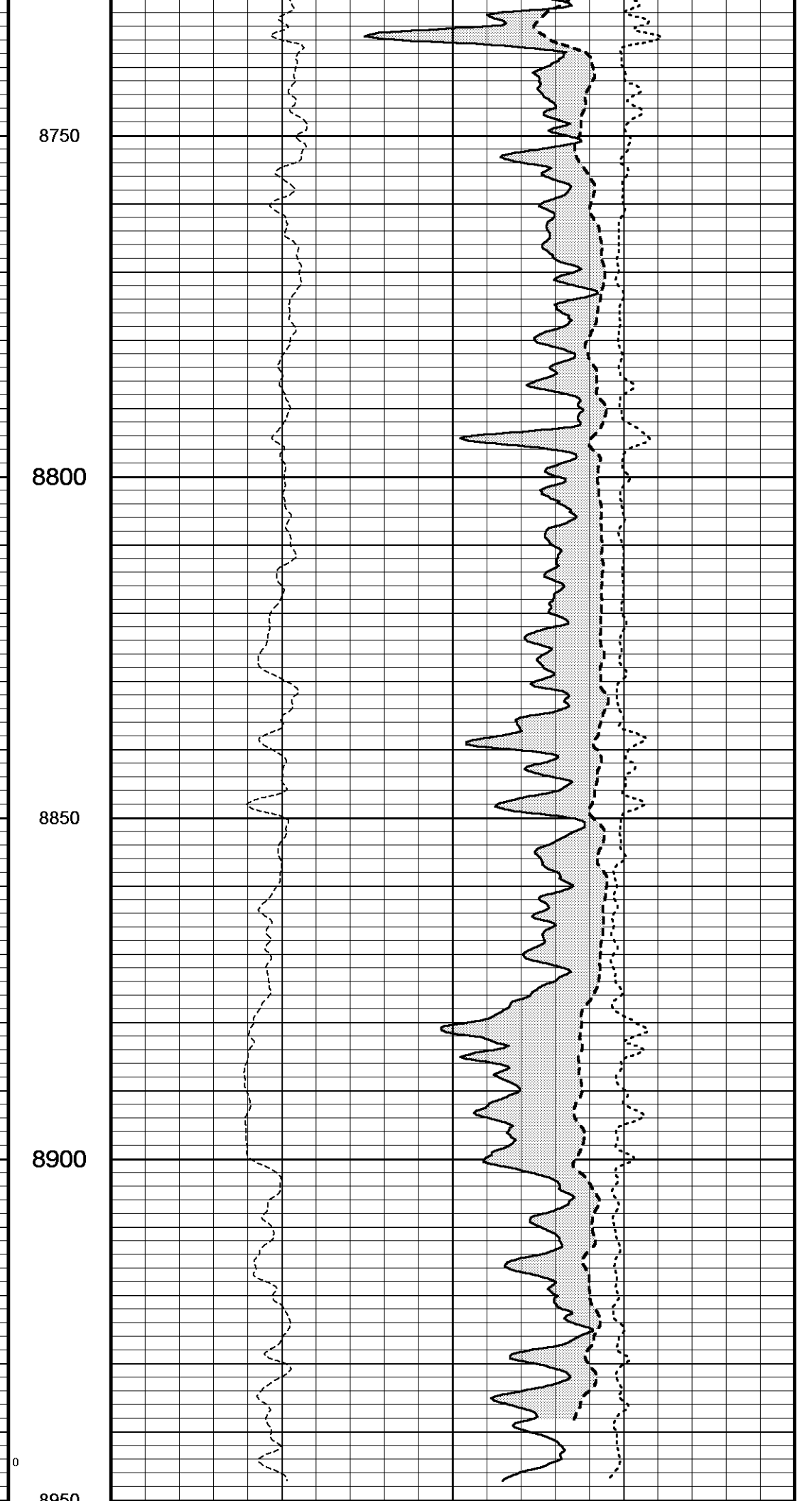
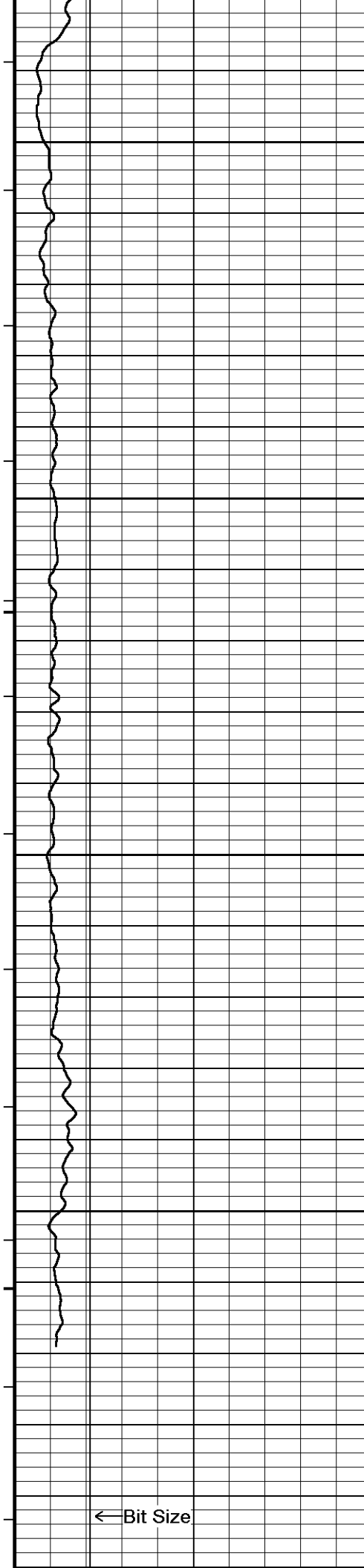
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8600

8650

8700

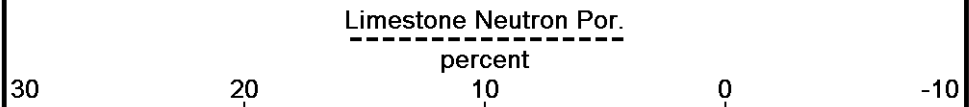




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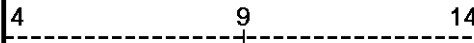
9014  
Depth  
In  
Feet

Timing Marks  
every 60.0 sec

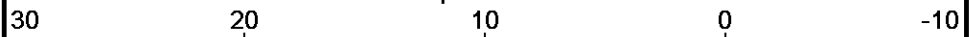


Density Caliper  
inches

HVI  
every  
10 cu ft

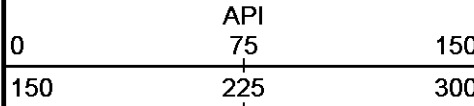


Limestone Density Por.  
percent



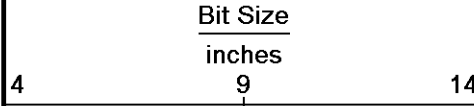
MGS Gamma Ray

Annular  
Integral  
every  
10 cu ft

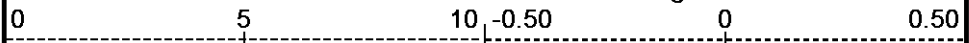


PE  
barns/electron

Density Correction  
grams/cc



Replay  
Scale  
1:240

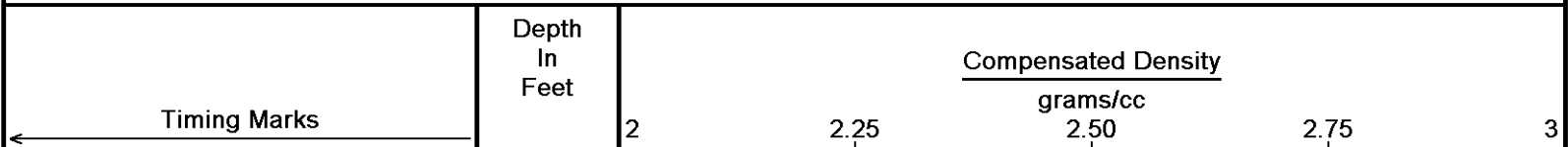


Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 03-MAR-2013 10:55  
 Filename: C:\Data\Sandridge Yost\MMS158 Depthlog new.dta Recorded on 01-MAR-2013 20:12  
 System Versions: Processed with 13.03.7594 Plotted with 13.03.7594

↑ 5 INCH MAIN PASS DSC ↑

↓ 5 INCH BULK DENSITY DSC ↓

Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 03-MAR-2013 10:55  
 Filename: C:\Data\Sandridge Yost\MMS158 Depthlog new.dta Recorded on 01-MAR-2013 20:12  
 System Versions: Processed with 13.03.7594 Plotted with 13.03.7594

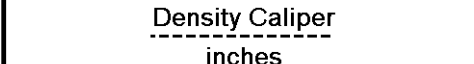
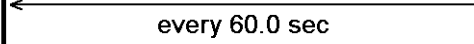


Timing Marks  
every 60.0 sec

Depth  
In  
Feet

Density Caliper  
inches

HVI  
every  
10 cu ft



4 9 14

15 cu ft

MGs Gamma Ray

API

75

150

150 225 300

Bit Size

inches

9

4 14

Annular  
Integral  
every  
10 cu ft

Replay  
Scale  
1:240

Limestone Density Por.

percent

30 20 10 0 -10

PE

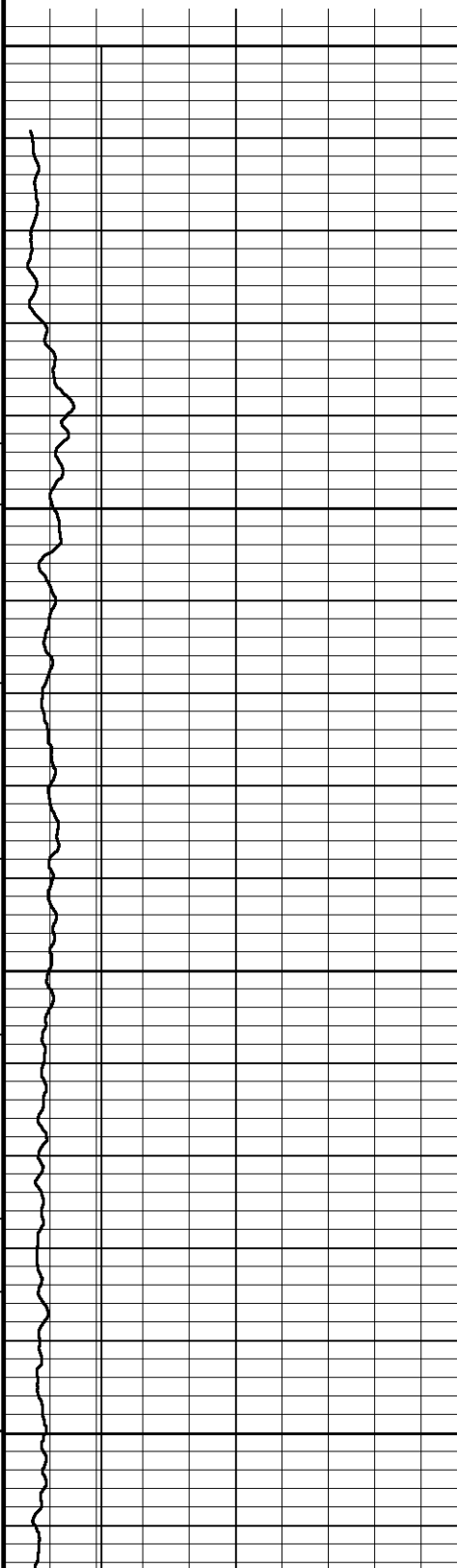
barns/electron

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Density Correction

grams/cc

0 0.50



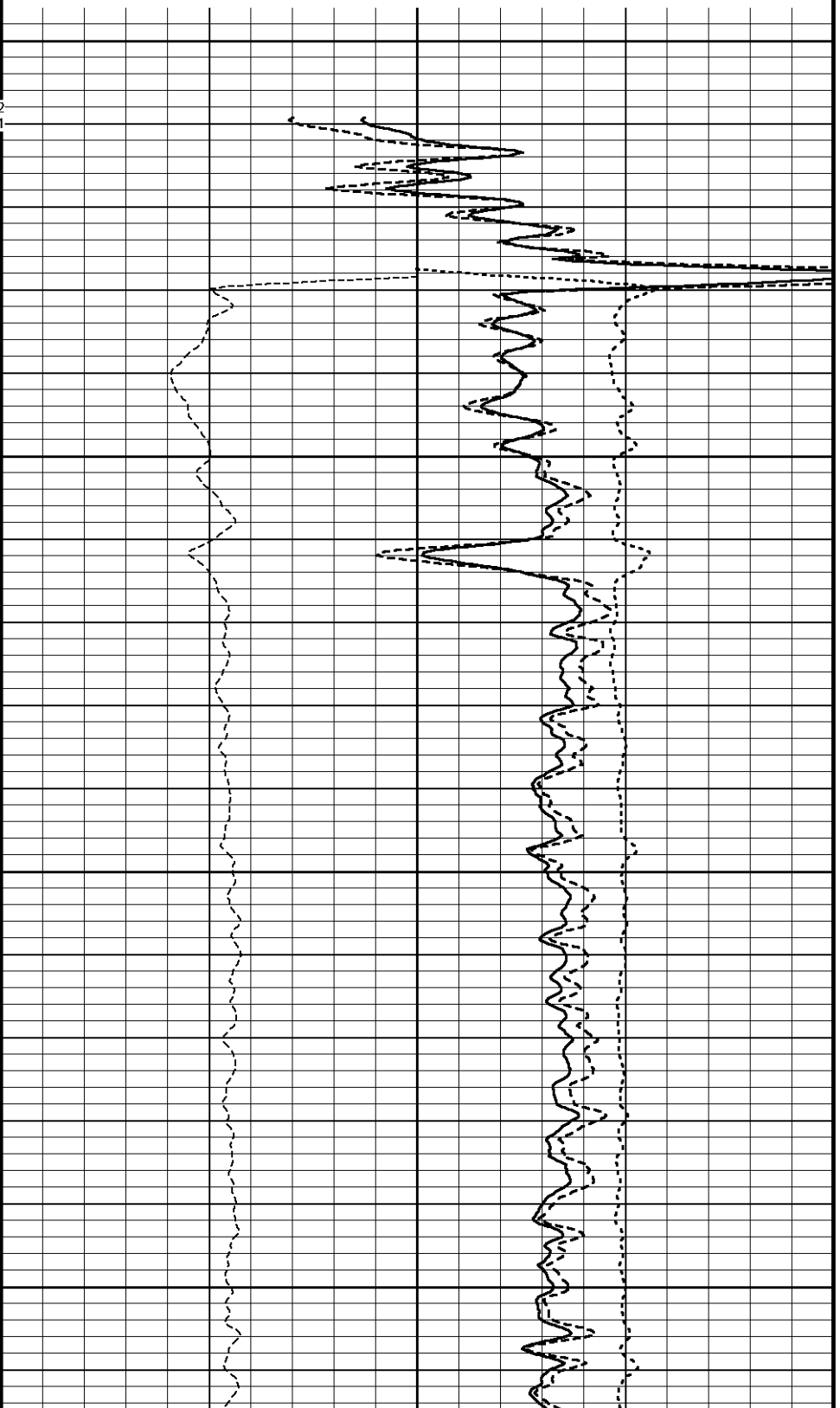
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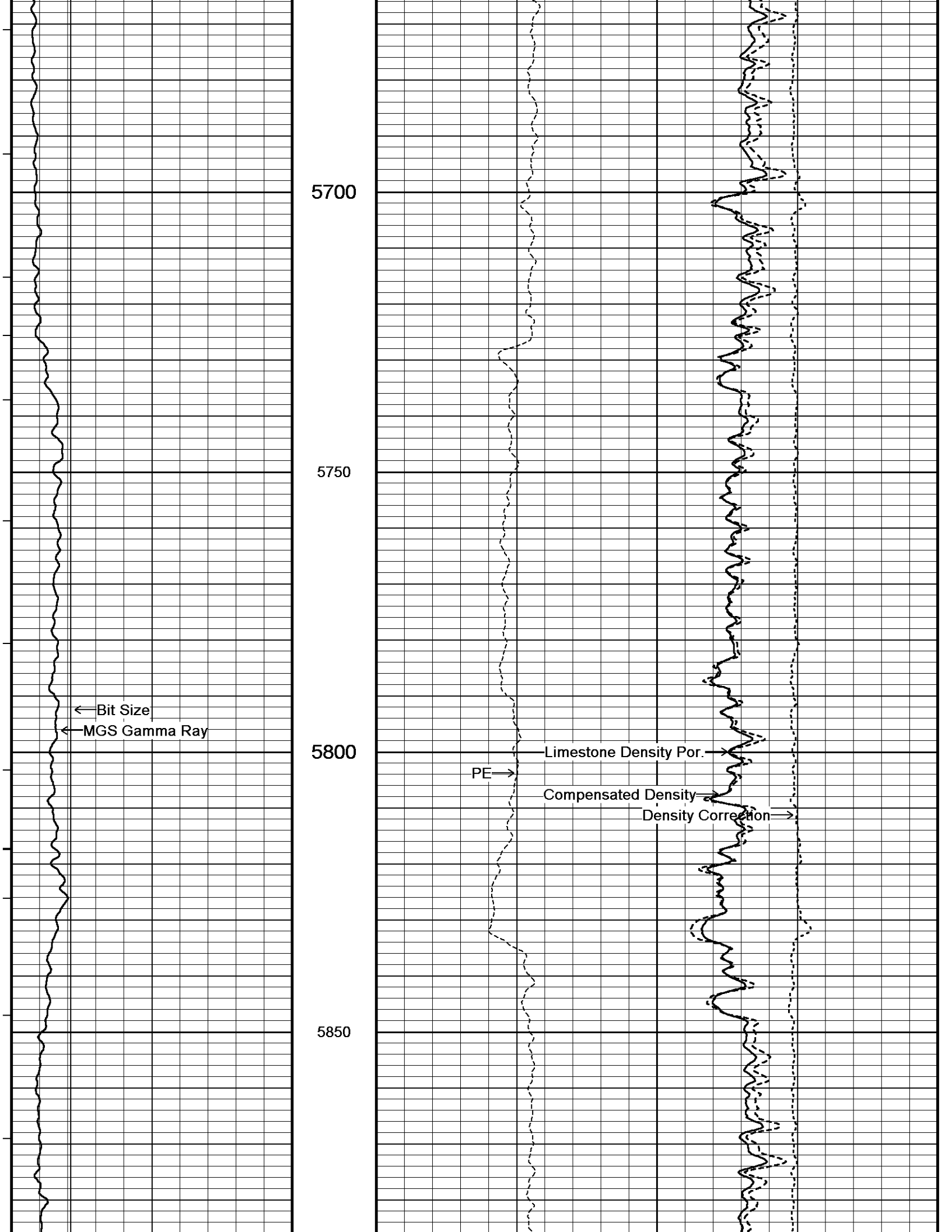
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Shoe

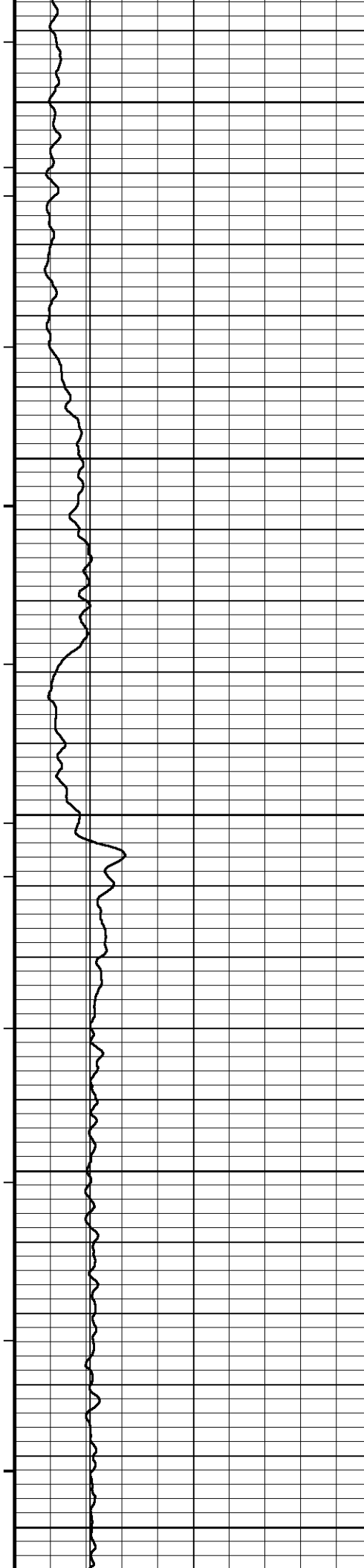
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5600

5650







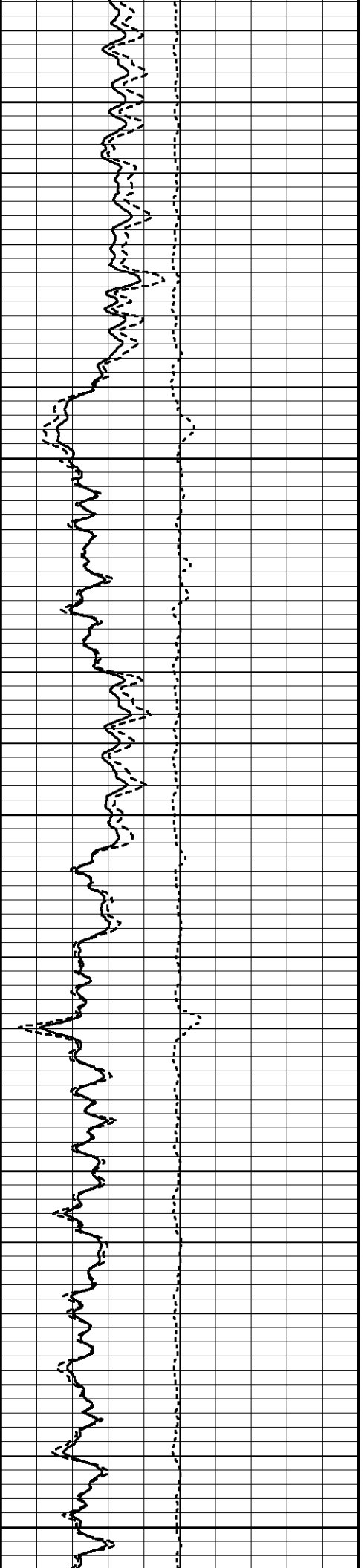
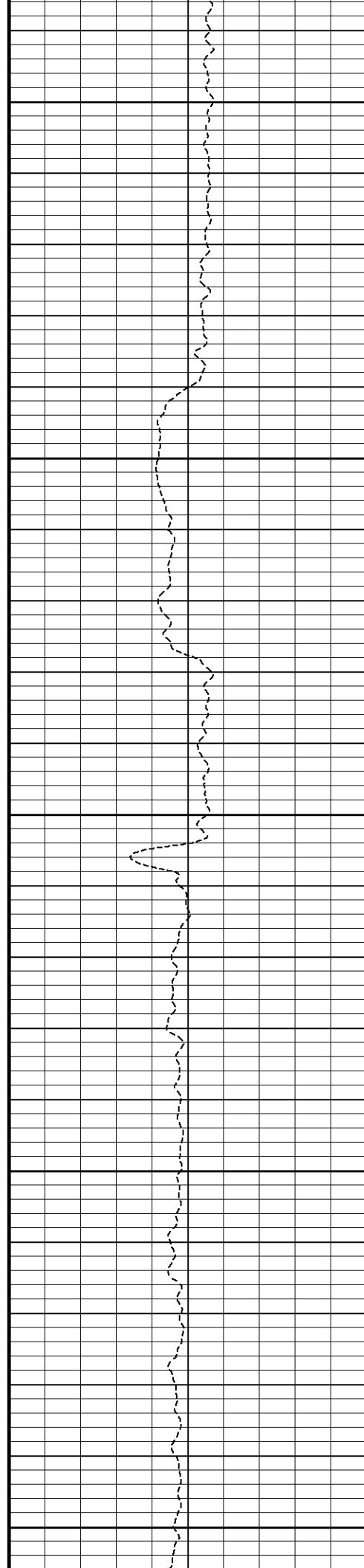
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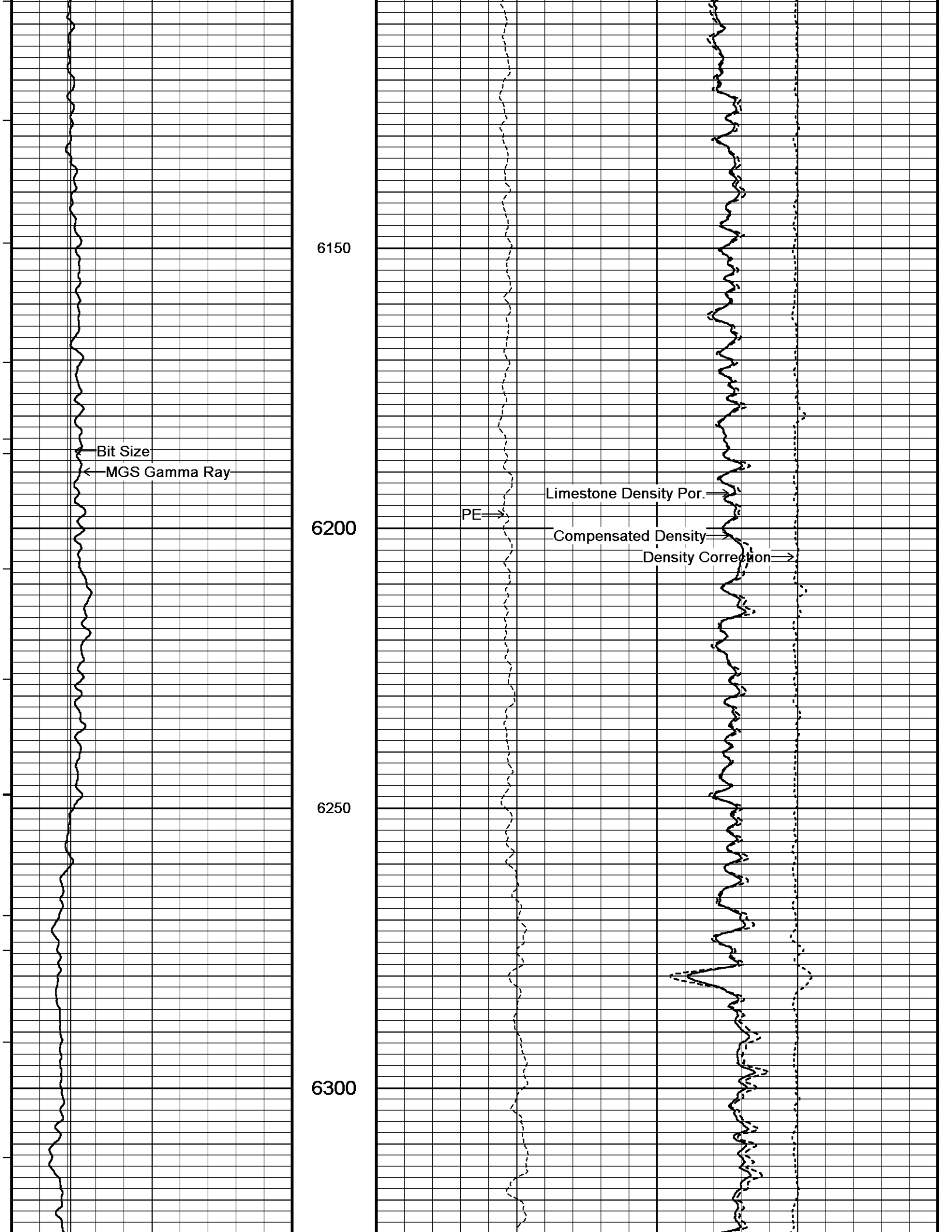
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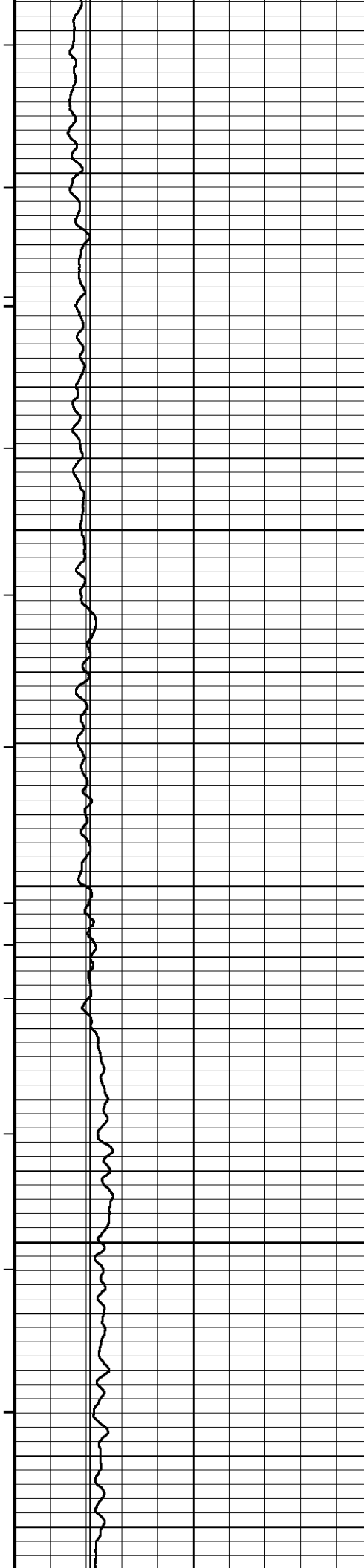
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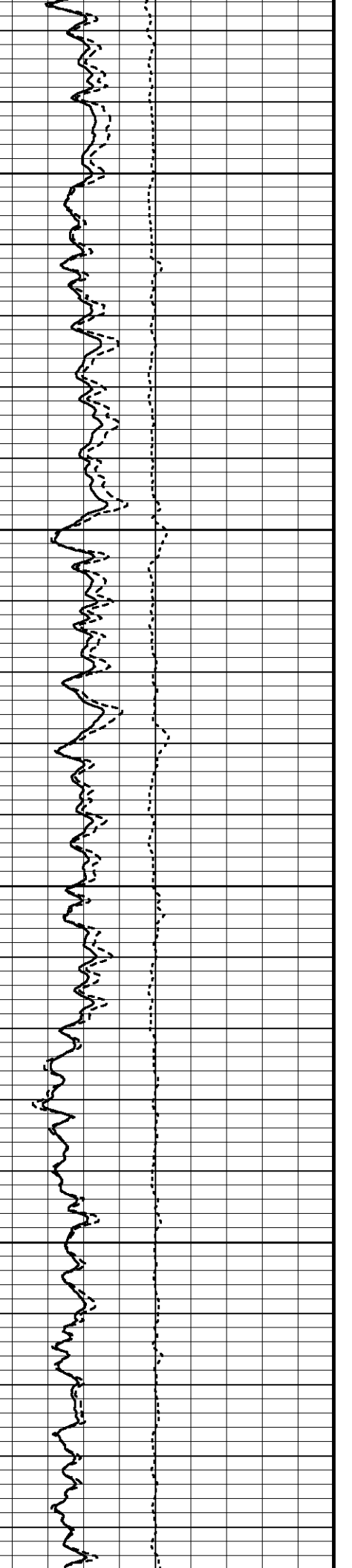
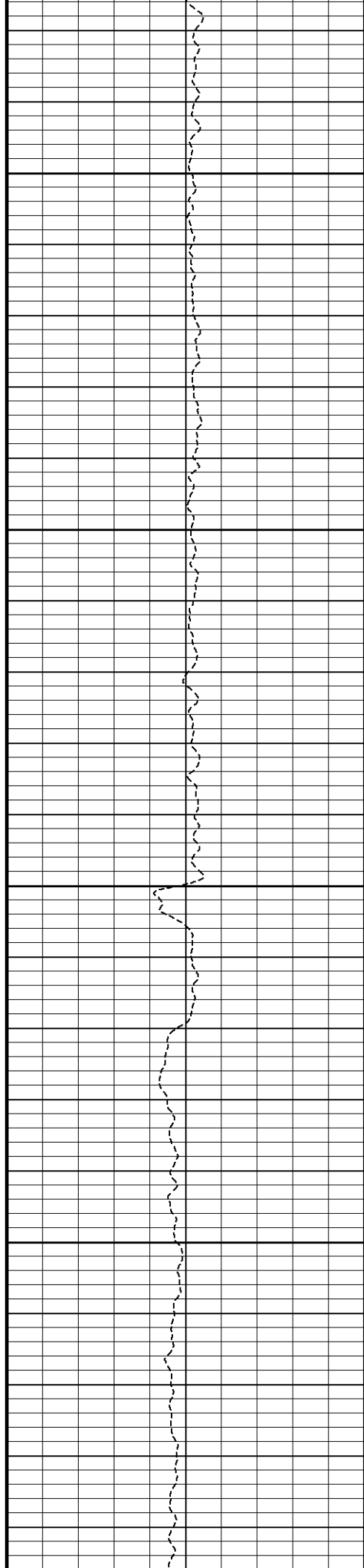


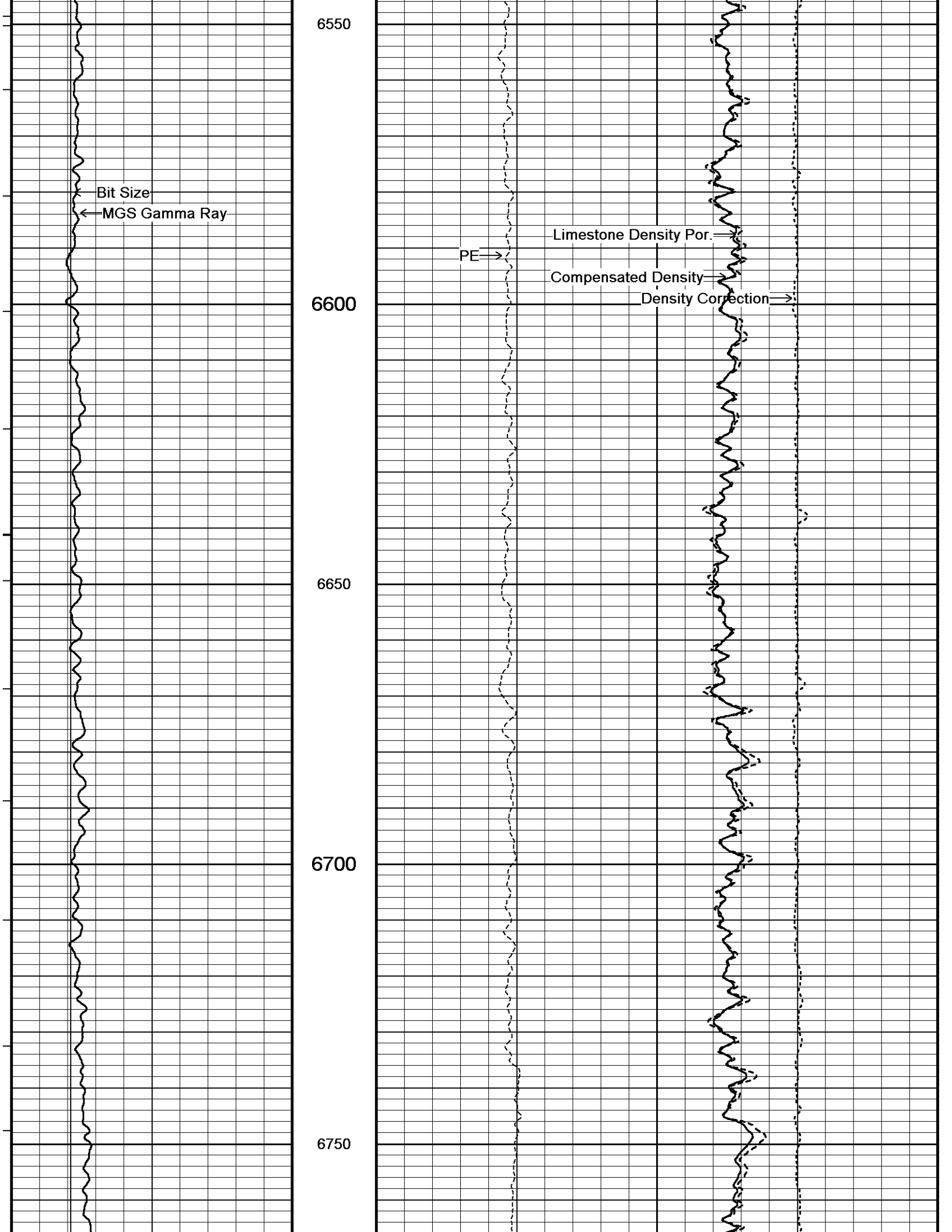
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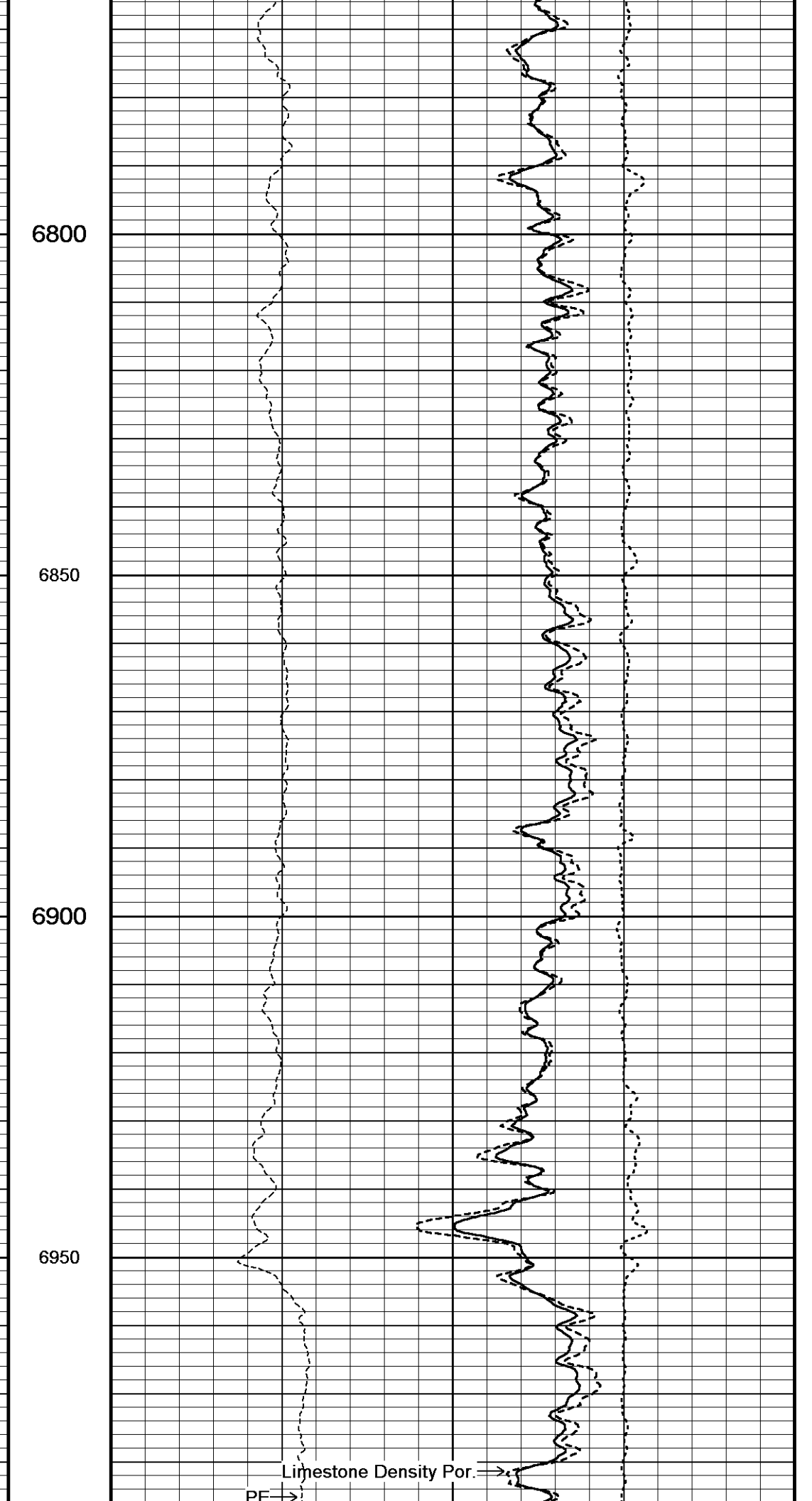
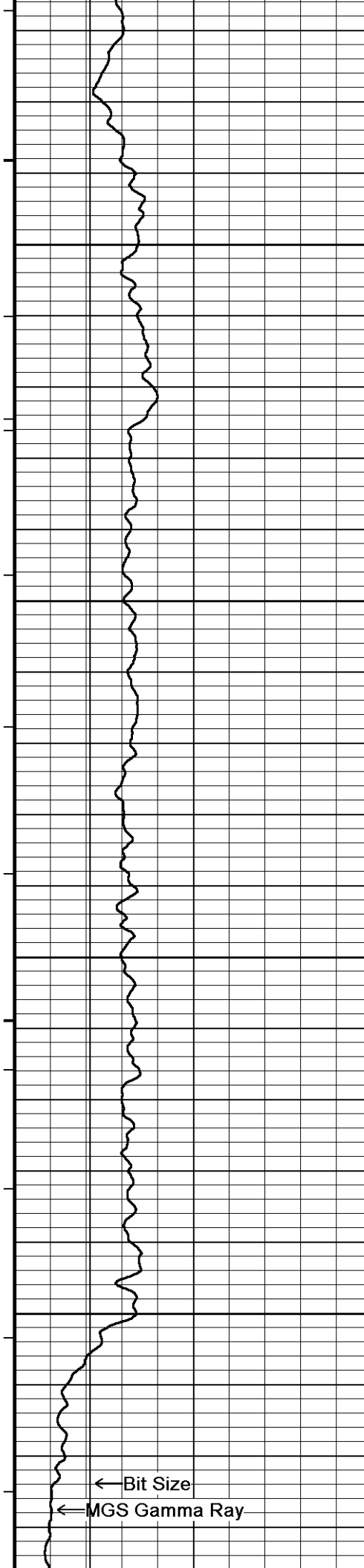
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6450

6500







6800

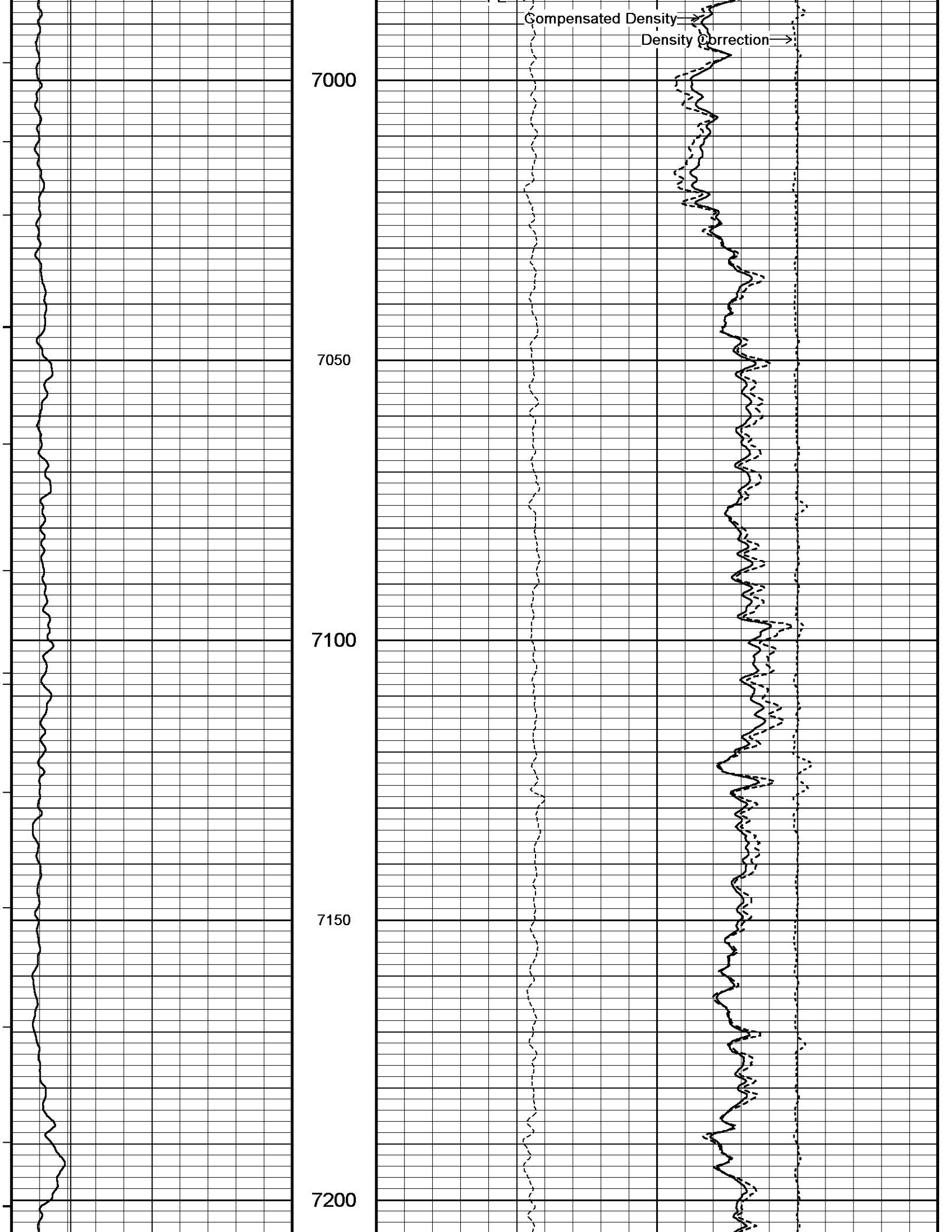
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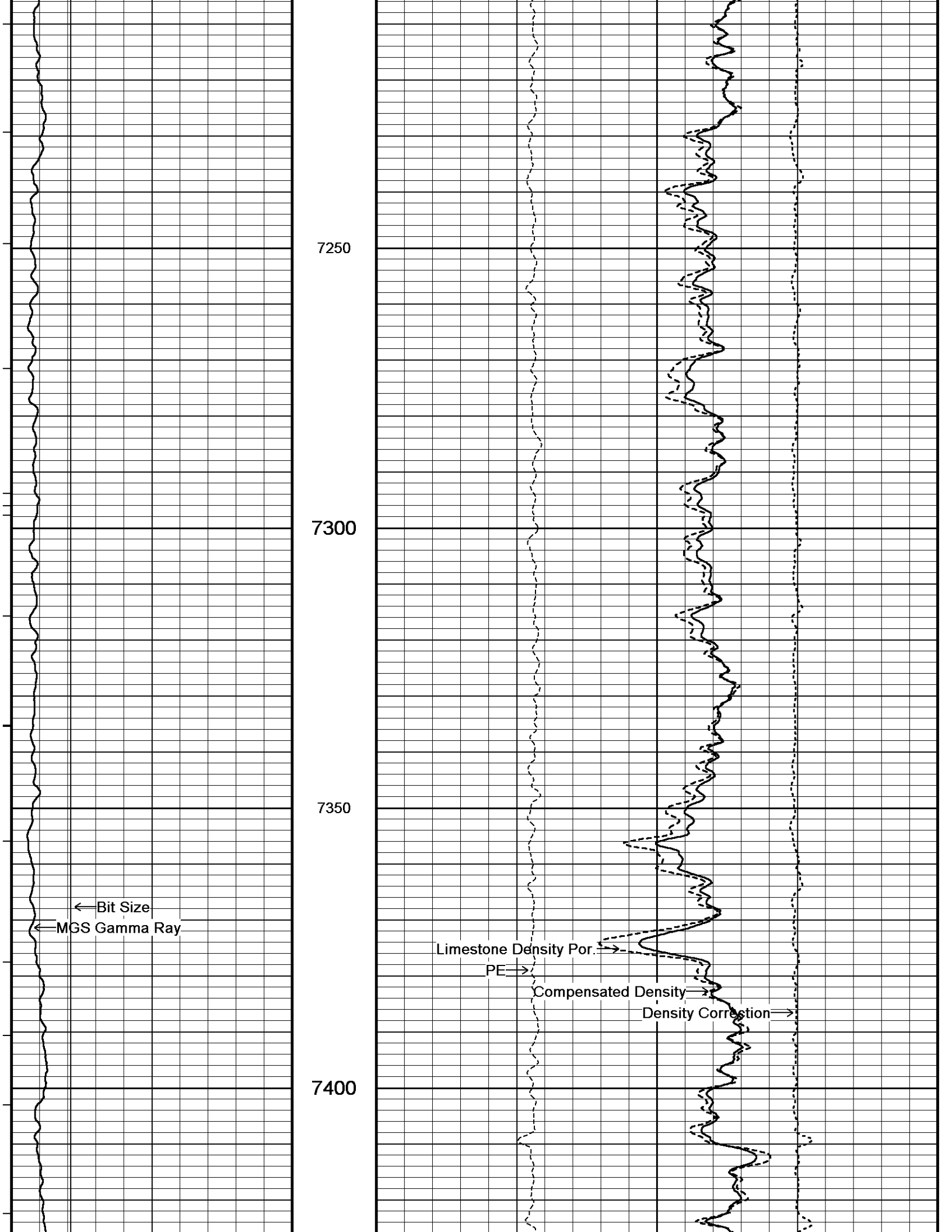
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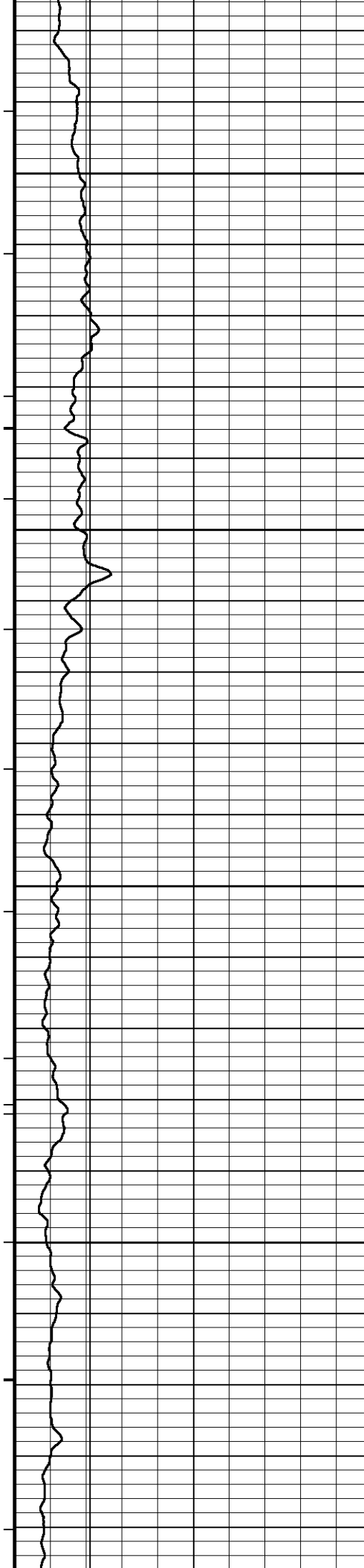
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← Bit Size  
← MGS Gamma Ray

Limestone Density Por. →  
PF →





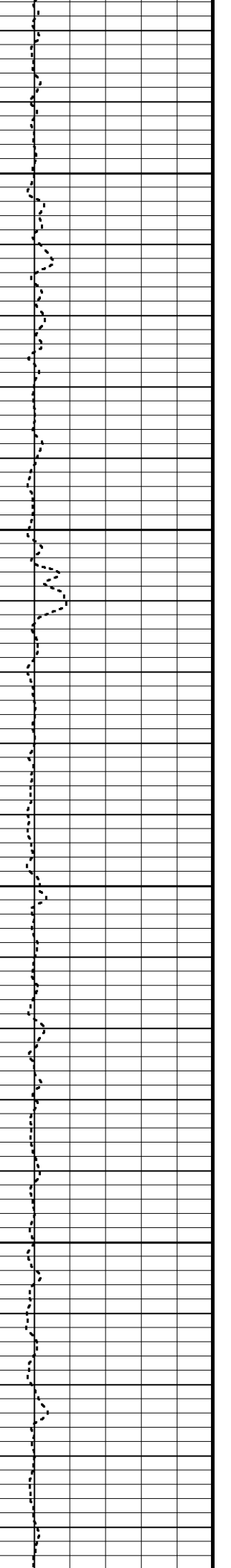
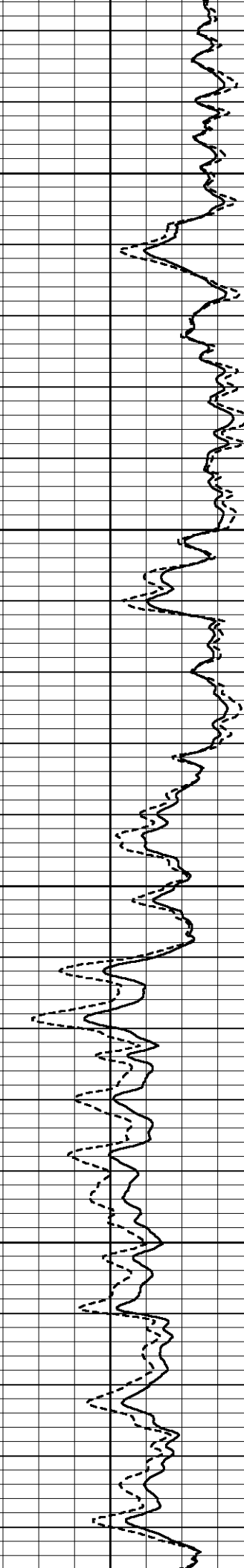
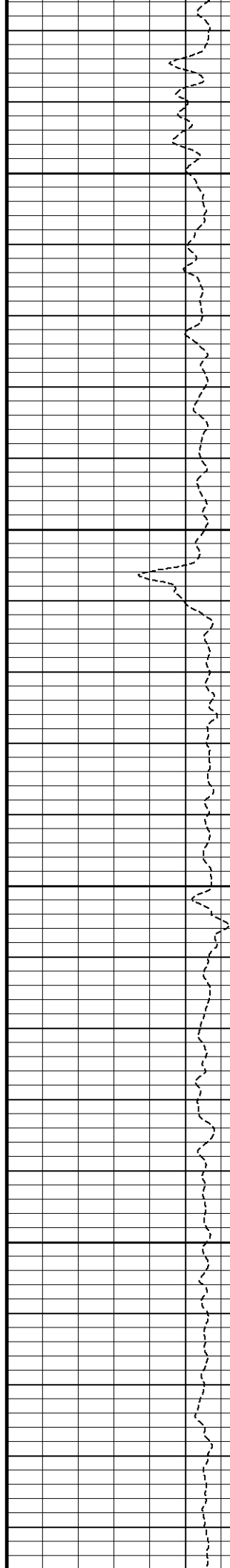


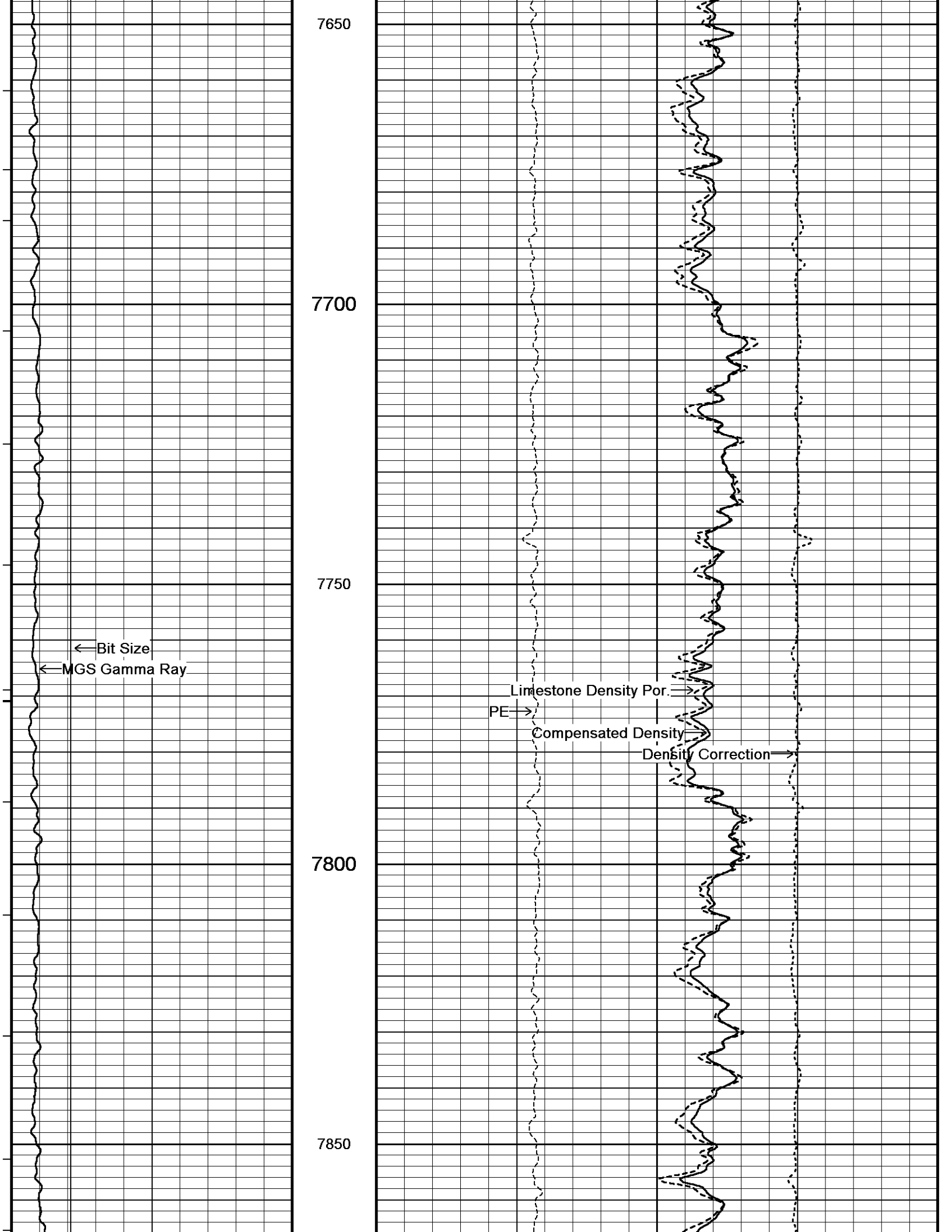
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7500

7550

7600





7650

7700

7750

7800

7850

← Bit Size

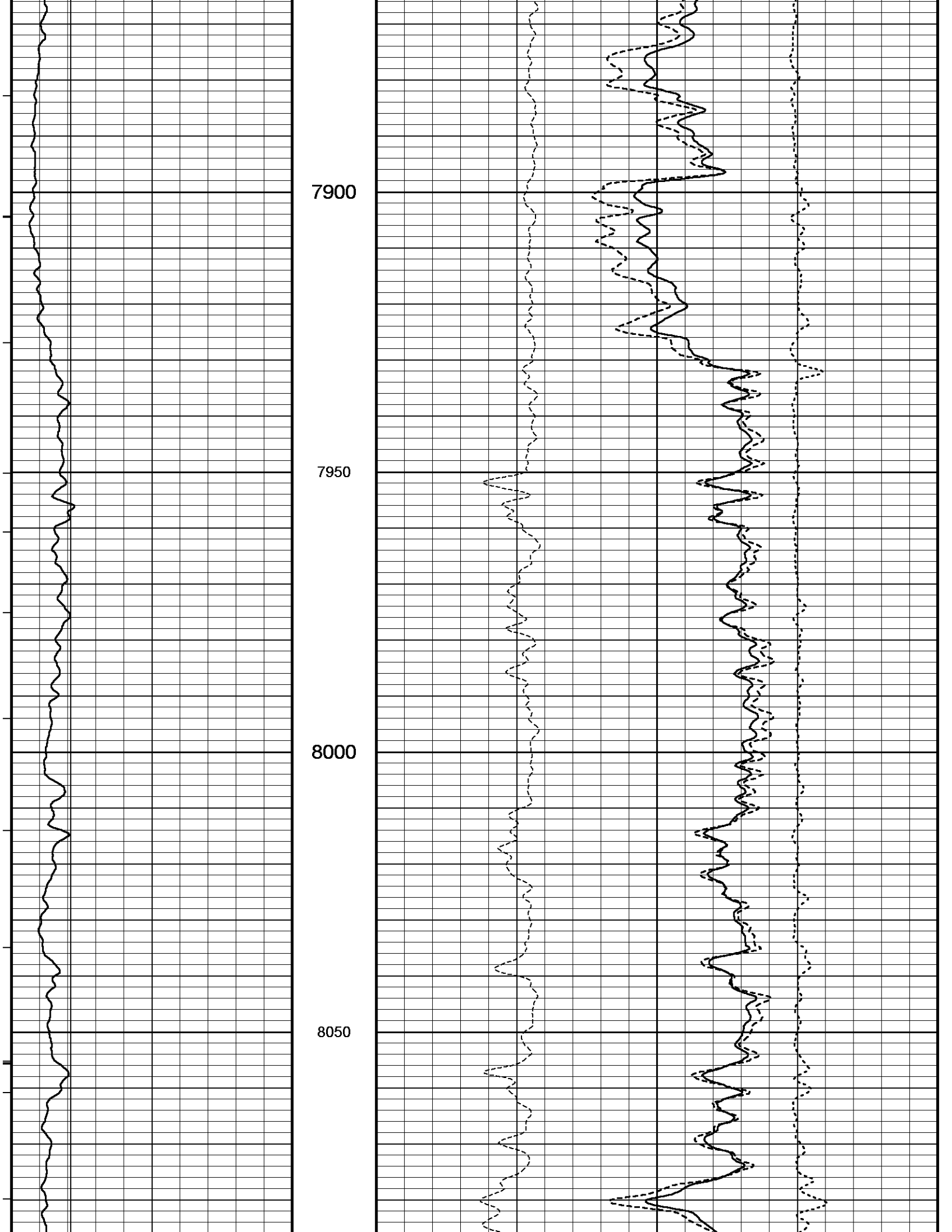
← MGS Gamma Ray

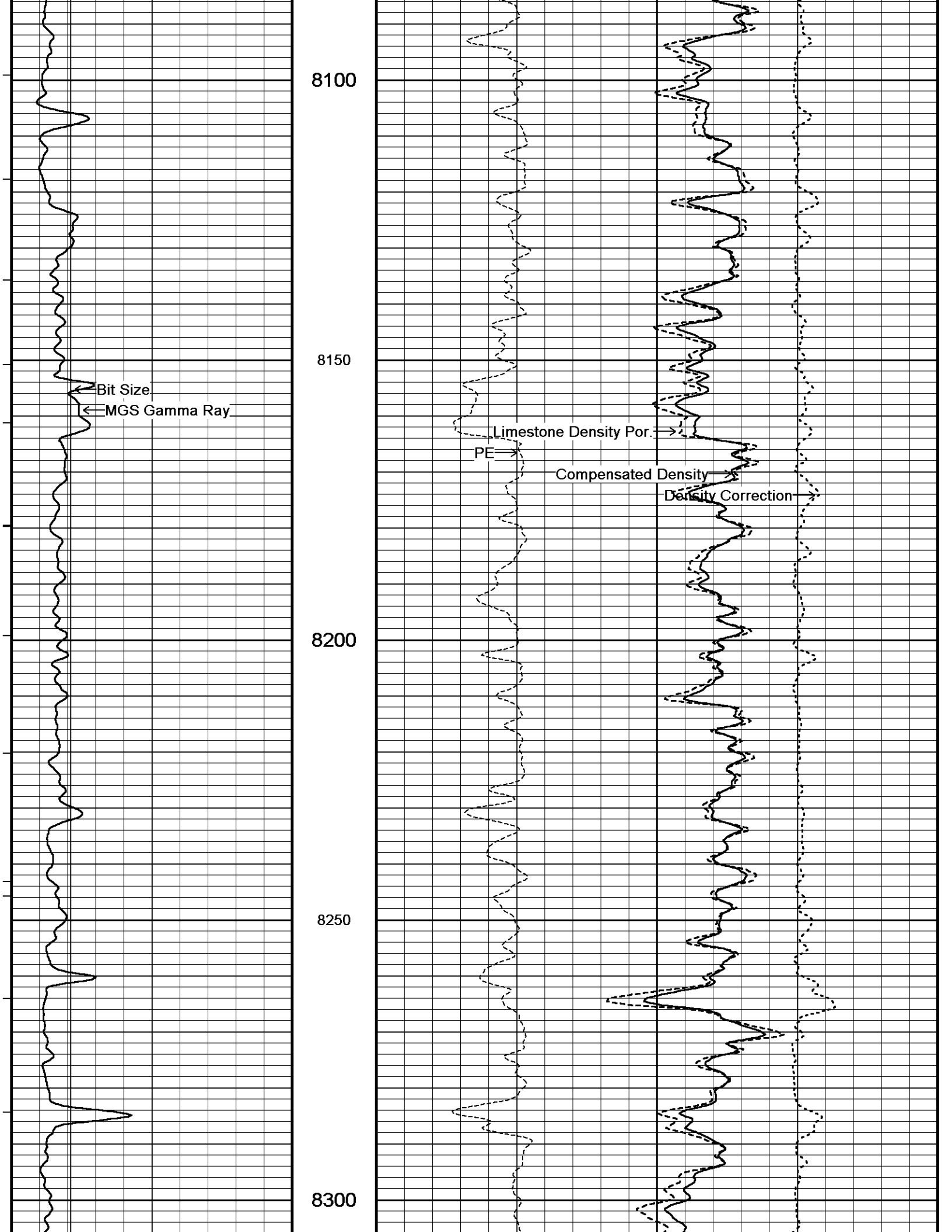
Limestone Density Por. →

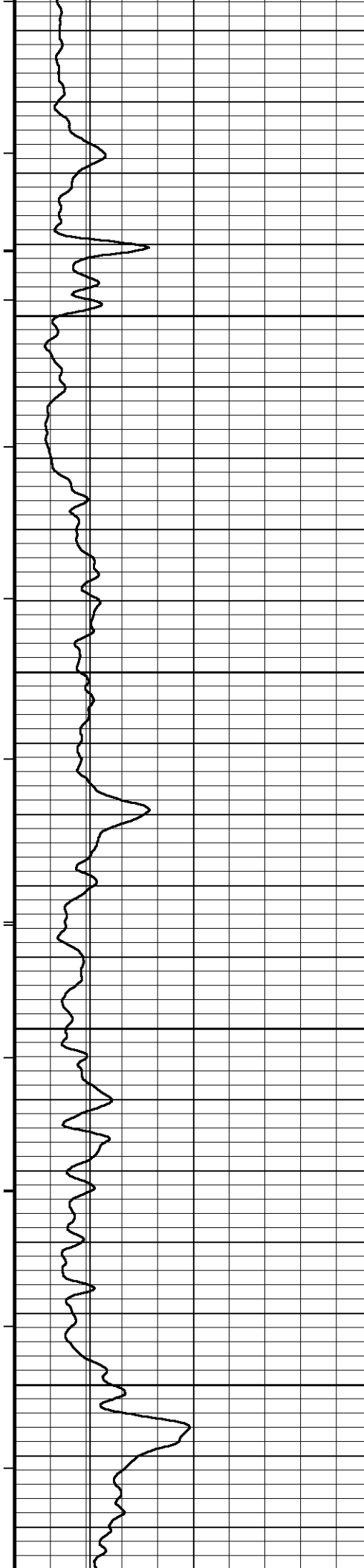
PE →

Compensated Density →

Density Correction →





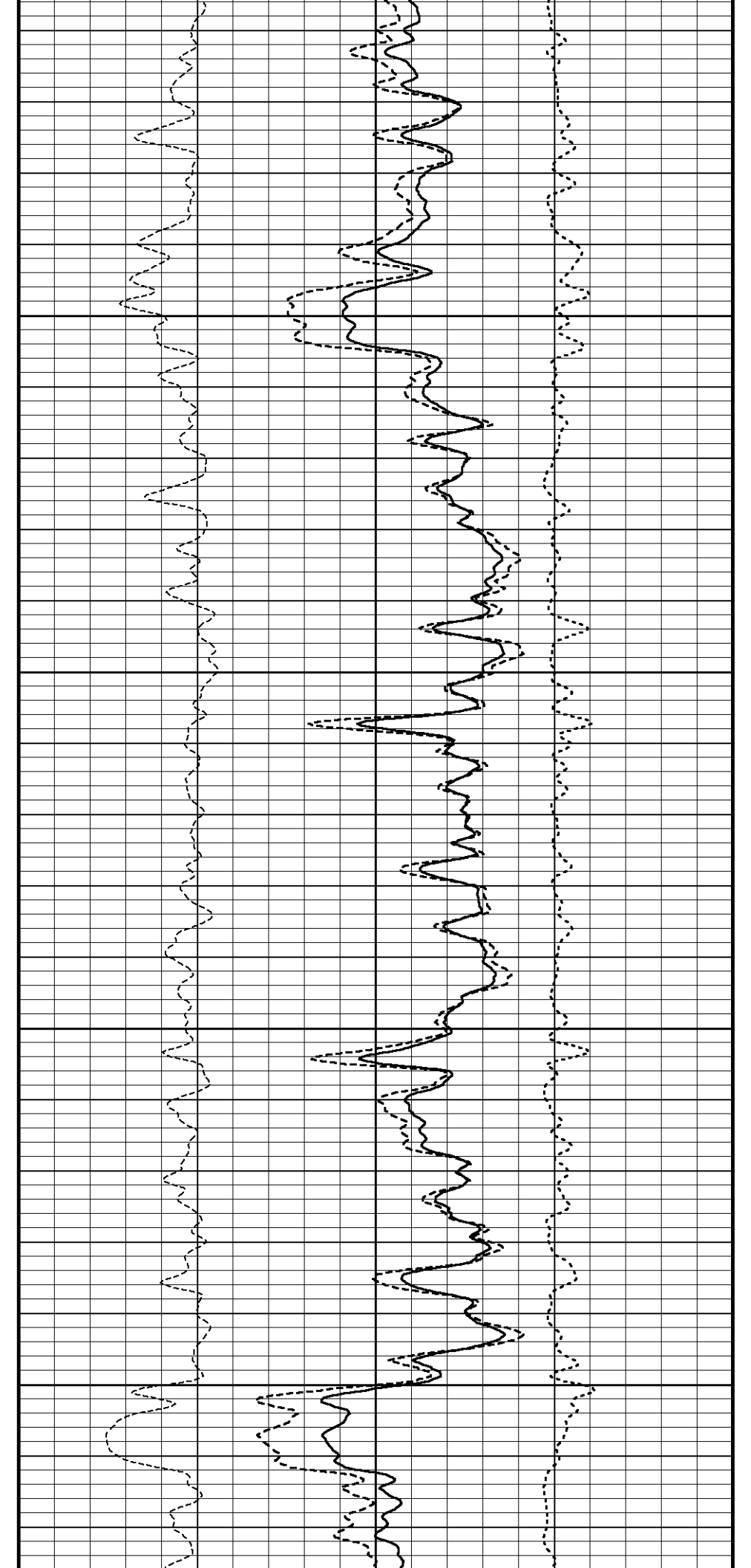


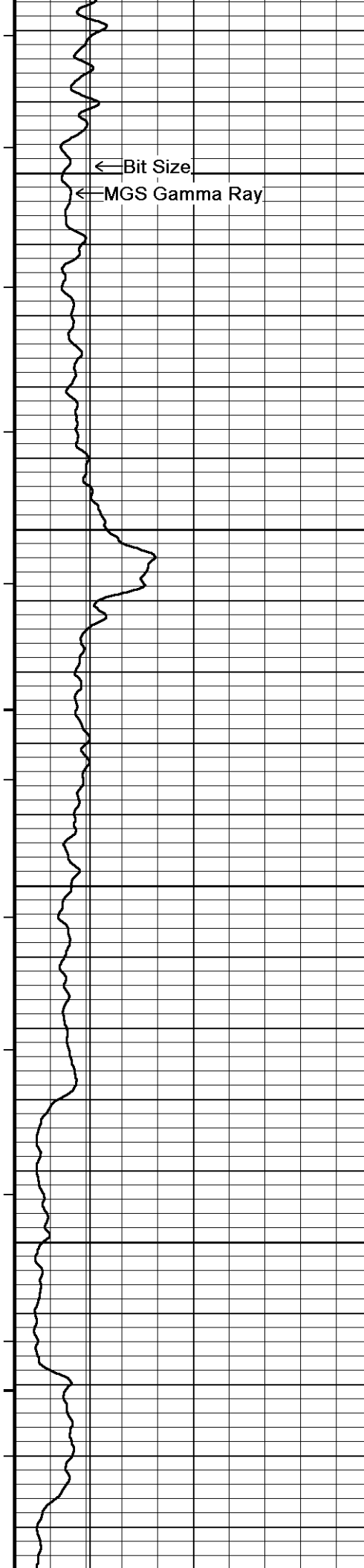
8350

8400

8450

8500



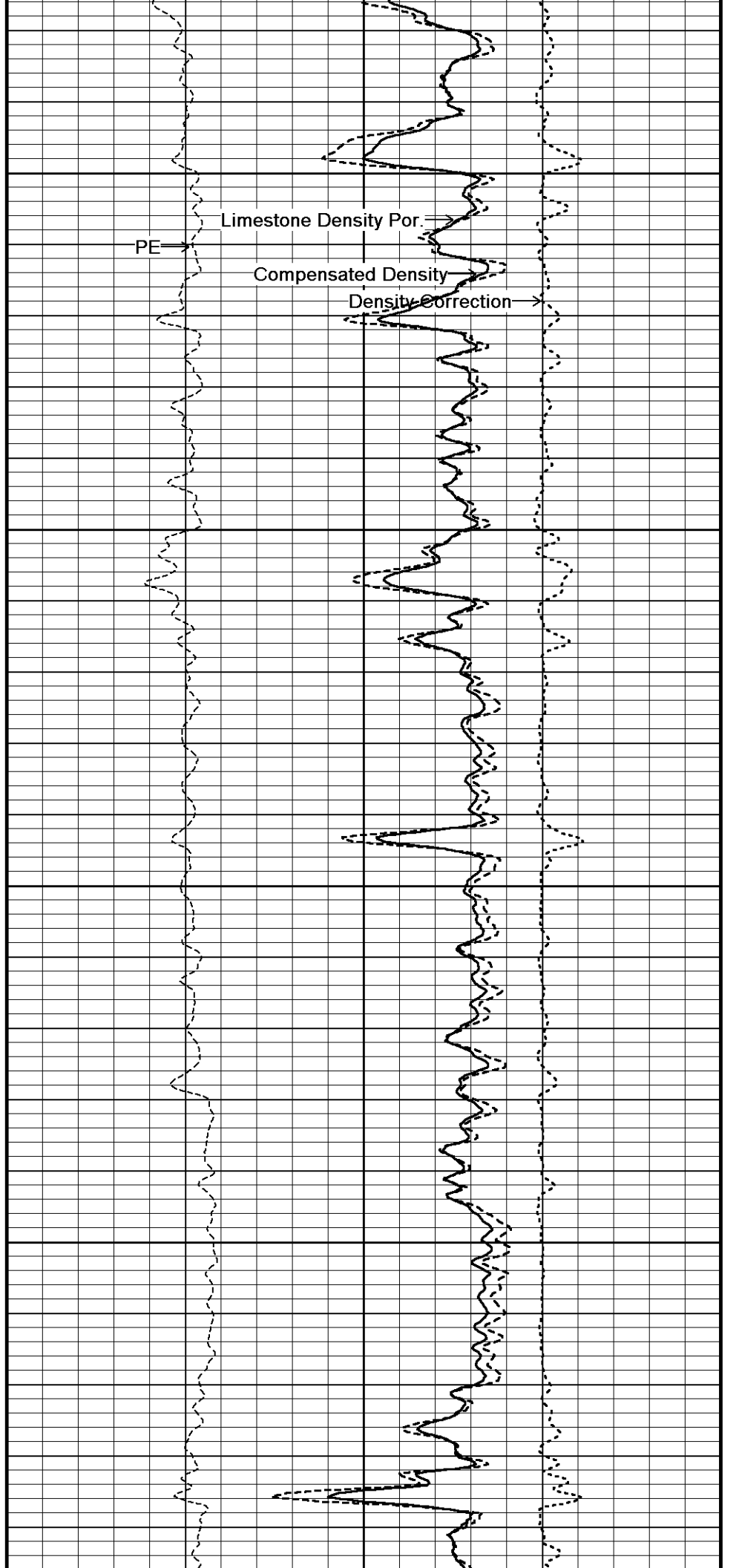


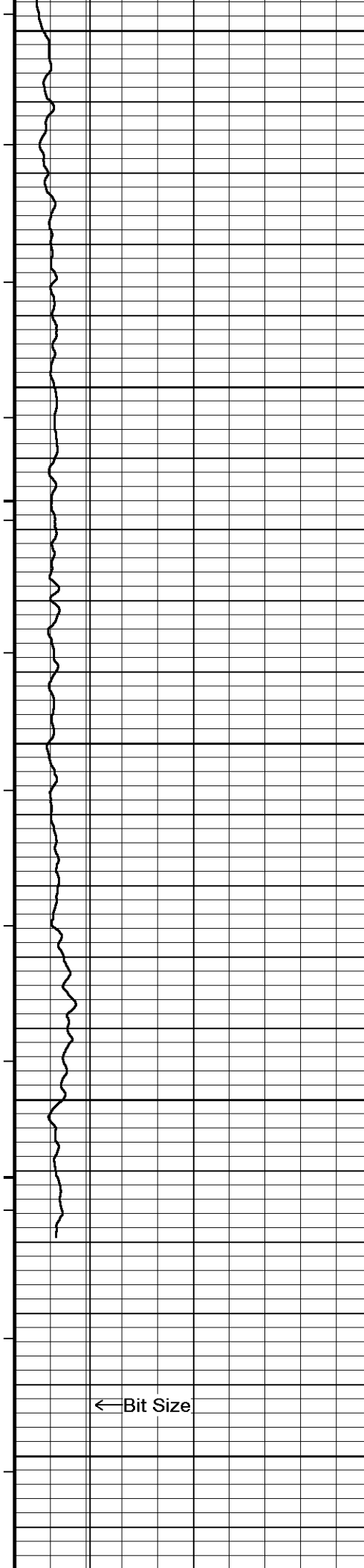
8550

8600

8650

8700





8750

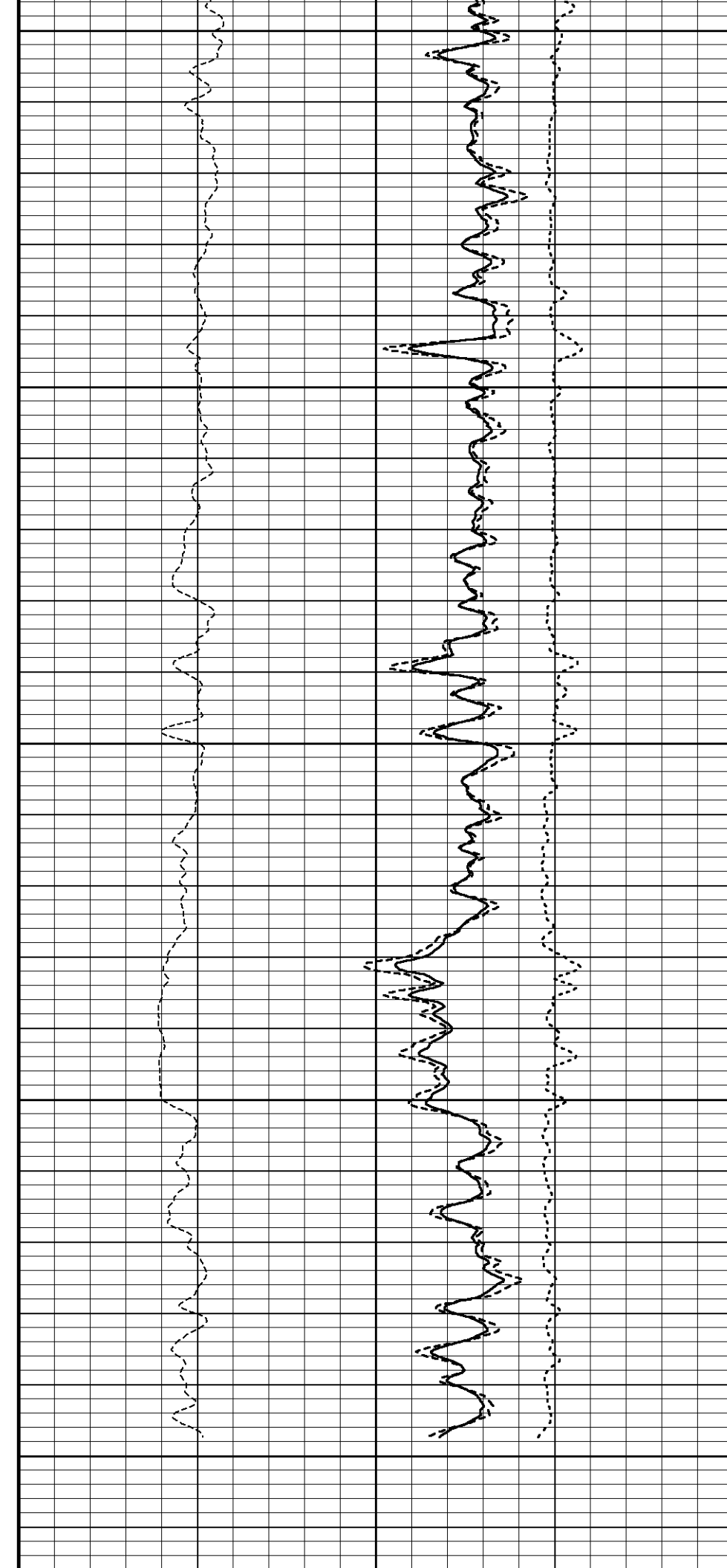
8800

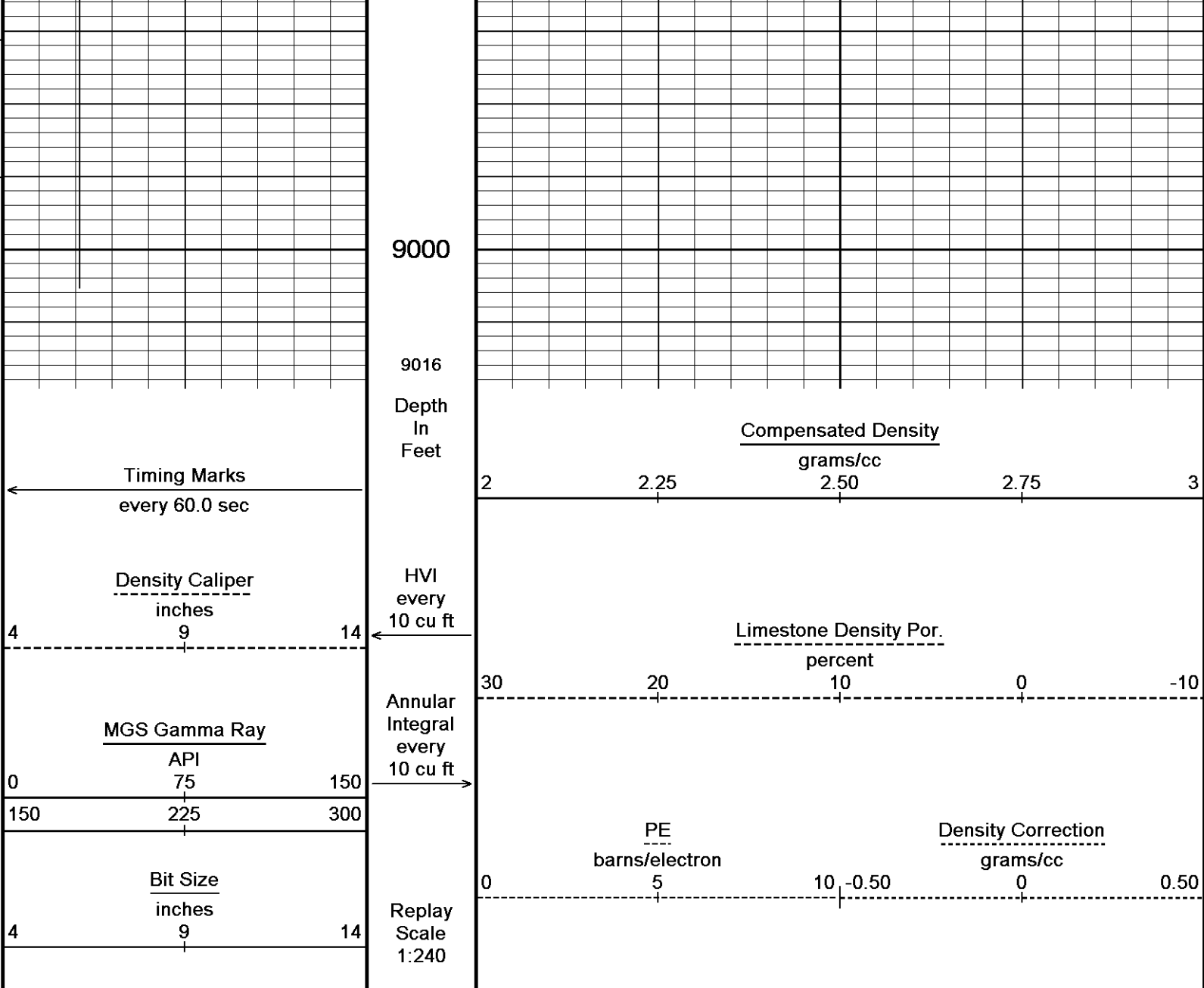
8850

8900

0

8950





Depth Based Data - Maximum Sampling Increment 10.0cm  
 Plotted on 03-MAR-2013 10:55  
 Filename: C:\Data\Sandridge Yost\MMS158 Depthlog new.dta  
 Recorded on 01-MAR-2013 20:12  
 System Versions: Processed with 13.03.7594 Plotted with 13.03.7594

5 INCH BULK DENSITY DSC

**BEFORE SURVEY CALIBRATION**  
 C:\Data\Sandridge Yost\MMS158 Depthlog new.dta

General Constants All 000 Last Edited on 01-MAR-2013,18:08

<b>General Parameters</b>		
Mud Resistivity	1.950	ohm-metres
Mud Resistivity Temperature	66.500	degrees F
Water Level	0.000	feet
Density/Neutron Processing	Wet Hole	
<b>Hole/Annular Volume and Differential Caliper Parameters</b>		
HVOL Method	Single Caliper	
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	N/A	
Annular Volume Diameter	4.500	inches
Caliper for Differential Caliper	Density Caliper	
<b>Rwa Parameters</b>		

Porosity used	Base Density Porosity
Resistivity used	Deep Induction
RWA Constant A	0.610
RWA Constant M	2.150

**Down-hole Tension Calibration SMS 0**

Field Calibration on 05-SEP-2012,13:01

Reading No	Measured	Calibrated (lbs)
1	15152.07	0.00
2	18386.74	2000.00

**Strain Gauge Constants MMS-E.B 158**

Last Edited on

Atmospheric Pressure	14.70	psi						
Serial Number	0							
Calibration Date	000000000000							
Base Check Date								
Dead Weight Serial Number	0							
Dead Weight Gravitational Correction	1.0							
Temperature	75.0	150.0	250.0	350.0	degrees F			
Pressure psia	Inc.	Dec.	Inc.	Dec.	Inc.	Dec.	Inc.	Dec.
0.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10000.0	0.000		0.000		0.000		0.000	

**Gamma Calibration MGS-C.J 133**

Field Calibration on 22-FEB-2013 09:59

	Measured	Calibrated (API)
Background	42	16
Calibrator (Gross)	1839	712
Calibrator (Net)	1797	696

**Gamma Constants MGS-C.J 133**

Last Edited on 24-FEB-2013,08:17

Gamma Calibrator Number	036	
Mud Density	1.01	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

**SP Calibration MGS-C.J 133**

Field Calibration on 07-FEB-2013,10:52

	Measured	Calibrated (mV)
Reference 1	-100.0	-100.0
Reference 2	100.0	100.0

**High Resolution Temperature Calibration MGS-C.J 133**

Field Calibration on 09-FEB-2013,12:46

	Measured	Calibrated(Deg F)
Lower	0.00	0.00
Upper	0.00	0.00

**High Resolution Temperature Constants MGS-C.J 133**

Last Edited on 09-FEB-2013,12:46

Pre-filter Length	11
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**Neutron Calibration MDN-B.J 423**

Base Calibration on 20-FEB-2013 09:27

Field Check on 22-FEB-2013 10:05

Base Calibration				
	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	2823	86	3714	110
Ratio	32.681		33.764	

Field Calibrator at Base		Calibrated (cps)	
		2197	3245
Ratio	0.677		

Field Check		Calibrated (cps)	
		1336	1952
Ratio	0.685		

## Neutron Constants MDN-B.J 423

Last Edited on 28-FEB-2013,16:30

Neutron Source Id	000		
Neutron Jig Number	000		
Epithermal Neutron	No		
Caliper Source for Processing	Bit Size		
Stand-off	0.00	inches	
Mud Density	0.99	gm/cc	
Limestone Sigma	7.10	cu	
Sandstone Sigma	4.26	cu	
Dolomite Sigma	4.70	cu	
Formation Pressure Source	None		
Formation Pressure	N/A	kpsi	
Temperature Source	None		
Temperature	N/A	degrees F	
Mud Salinity	0.00	kppm	
Salinity Correction	Not Applied		
Formation Fluid Salinity Source	None		
Formation Fluid Salinity	N/A	kppm	
Barite Mud Correction	Not Applied		

## Navigation Constants MIE-A.A 209

Last Edited on

Magnetic Declination	0.00	degrees	East
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## Imager Pad Check MIE-A.A 209

Field Check on

Pad 1	Pad Not Tested	Pad 5	Pad Not Tested
Pad 2	Pad Not Tested	Pad 6	Pad Not Tested
Pad 3	Pad Not Tested	Pad 7	Pad Not Tested
Pad 4	Pad Not Tested	Pad 8	Pad Not Tested

## Compact Micro Imager Constants MIE-A.A 209

Last Edited on 01-MAR-2013,21:55

Sonde Configuration	Imager Mode		
Arm-Pad Kit	Normal Pads (12.25 in)		
Arm-Pad Kit Serial Number	N/A		
Centre Pad 1 Rotational Offset	0.00	degrees	
Image/Borehole Ovality Reference	Azimuth of Pad 1		
Non Active Buttons	Omit		
Search Angle	0.00	degrees	
Correlation Interval	3.28	feet	
Correlation Step	1.64	feet	
Current Offset	0.0000	mAmp	
Squasher Start	0.0500	mAmp	
Image Processing	Disabled		

## Magnetometer Parameters MIE-A.A 209

Date Of Last Magnetometer Calibration	26-NOV-2010,12:01		
Slope	X Magnetometer	Y Magnetometer	Z Magnetometer
Offset	-1.000000	-1.001951	-1.007691
	0.007782	-0.016800	0.011730

## Magnetometer Constants MIE-A.A 209

Last Edited on

Magnetometer Calibrator Number	000
--------------------------------	-----

## Accelerometer Parameters MIE-A.A 209

Date Of Last Accelerometer Calibration	25-NOV-2010,12:19		
Slope	X Accelerometer	Y Accelerometer	Z Accelerometer
Offset	-1.113214	-1.109979	-1.101653
	0.005467	0.005399	0.010368

## Accelerometer Constants MIE-A.A 209

Last Edited on 25-NOV-2010,12:25

Accelerometer Calibrator Number	000
---------------------------------	-----

Accelerometer Temperature Characterisation  
X Accelerometer

Serial Number 826  
 Calibration Date 01-Jan-1998  
 Bias(g) 0.00000e+000 B0 B1 B2 B3  
 2.32377e-005 -1.87334e-008 9.07324e-011  
 SF0 SF1 SF2 SF3  
 Scale Factor(mA/g) 3.00000e+000 2.71389e-004 4.55326e-007 4.58364e-010

Y Accelerometer  
 Serial Number 617  
 Calibration Date 11-May-2008  
 Bias(g) 0.00000e+000 B0 B1 B2 B3  
 1.76675e-005 6.93464e-010 2.98691e-011  
 SF0 SF1 SF2 SF3  
 Scale Factor(mA/g) 3.00000e+000 2.56882e-004 5.72598e-007 2.37496e-010

Z Accelerometer  
 Serial Number 844  
 Calibration Date 01-Jan-1998  
 Bias(g) 0.00000e+000 B0 B1 B2 B3  
 -1.21769e-005 -1.46867e-008 -6.44015e-011  
 SF0 SF1 SF2 SF3  
 Scale Factor(mA/g) 3.00000e+000 2.73539e-004 4.65657e-007 2.88996e-010

Caliper Calibration MIE-A.A 209 Base Calibration on 20-JUL-2012 05:31  
Field Calibration on

Base Calibration

Reading No	Pads 1-5 Meas.	Pads 3-7 Meas.	Calibrator Size (in)
1	26963	26793	5.96
2	36961	37191	7.97
3	46401	44863	9.84
4	58072	58409	11.91
5	0	0	0.00

Reading No	Pad 2 Meas.	Pad 4 Meas.	Pad 6 Meas.	Pad 8 Meas.	Calibrator Size (in)
1	24829	25688	24937	24692	5.96
2	33487	34230	33721	33433	7.97
3	40559	41186	42962	42856	9.84
4	51771	52426	51758	51697	11.91
5	0	0	0	0	0.00

Field Calibration

	Measured Pads 1-5 Caliper(in)	Measured Pads 3-7 Caliper(in)	Actual Caliper(in)
	0.00	0.00	0.00

	Measured Pad 2 Caliper(in)	Measured Pad 4 Caliper(in)	Measured Pad 6 Caliper(in)	Measured Pad 8 Caliper(in)	Actual Caliper(in)
	0.00	0.00	0.00	0.00	0.00

Caliper Constants MIE-A.A 209 Last Edited on 25-NOV-2010,07:57

Caliper Difference for BRKT 0.120 inches

High Resolution Temperature Calibration MAI-C.A 427 Field Calibration on 22-FEB-2013,09:43

	Measured	Calibrated(Deg F)
Lower	10.00	10.00
Upper	100.00	100.00

High Resolution Temperature Constants MAI-C.A 427 Last Edited on 22-FEB-2013,09:43

Pre-filter Length 11

Induction Calibration MAI-C.A 427 Base Calibration on 27-JAN-2013,14:35  
Field Check on 28-FEB-2013 16:25

Base Calibration

Test Loop Calibration Channel	Measured		Calibrated (mmho/m)	
	Low	High	Low	High
1	14.4	434.9	9.3	966.2
2	5.8	355.4	7.6	821.4
3	2.7	244.4	5.2	566.0
4	1.8	129.3	2.6	279.2

Array Temperature 22.9 Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1			17.6	4141.0
2			32.0	3771.0
3			31.3	3210.4
4			20.0	2124.7
Deep			19.5	2020.4
Medium			45.8	4289.4
Shallow			47.1	5679.6
Array Temperature			45.3	Deg F

Induction Constants MAI-C.A 427

Last Edited on 28-FEB-2013,16:23

Induction Model	VECTAR		
Caliper for Borehole Corr.	Density Caliper		
Hole Size for Borehole Correction		N/A	inches
Tool Centred	No		
Stand-off Type	Fins		
Stand-off		0.50	inches
Number of Fins on Stand-off	6.0000		
Stand-off Fin Angle		60.00	degrees
Stand-off Fin Width		0.5000	inches
Borehole Corr. Rm Source	Temperature Corr		
Temp. for Rm Corr.	MGS External Temperature		
Squasher Start		0.0020	mhos/metre
Squasher Offset		0.0000	mhos/metre
Borehole Normalisation			
DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000
Calibration Site Corrections			
Channel 1		0.00	mmhos/metre
Channel 2		0.00	mmhos/metre
Channel 3		0.00	mmhos/metre
Channel 4		0.00	mmhos/metre
Apparent Porosity and Water Saturation Constants			
Archie Constant (A)	1.00		
Cementation Exponent (M)	2.00		
Saturation Exponent (N)	2.00		
Saturation of Water for Apor	100.00		percent
Resistivity of Water for Apor and Sw		0.05	ohm-m
Resistivity of Mud Filtrate for Sw		0.00	ohm-m
Source for Rt	0.00		
Source for Rxo	0.00		

Photo Density Calibration MPD-D.A 471

Base Calibration on 04-FEB-2013 13:31  
Field Check on 28-FEB-2013 16:30

Density Calibration				
Base Calibration		Measured	Calibrated (sdu)	
		Near	Near	Far
Reference 1	54416	27473	59869	31110
Reference 2	22802	2732	24557	2522
Field Check at Base				
	1278.8	1479.3		
Field Check				
	1138.1	1307.6		
PE Calibration				
Base Calibration		Measured	Calibrated	
	WS	WH	Ratio	Ratio
Background	247	1133		

Reference 1	24125	54197	0.450	0.369
Reference 2	7025	22646	0.315	0.271

Field Check at Base  
247.3      1133.4

Field Check  
210.7      1029.0

Density Constants MPD-D.A 471

Last Edited on 24-FEB-2013,08:18

Density Source Id	243	
Nylon Calibrator Number	633	
Aluminium Calibrator Number	633	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.01	gm/cc
Mud Density Z/A Multiplier	1.11	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Hybrid	
Matrix Density (gm/cc)	Depth (ft)	
2.71	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	

Caliper Calibration MPD-D.A 471

Base Calibration on 04-FEB-2013 23:20  
Field Calibration on 22-FEB-2013 09:54

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	19168	3.99
2	28887	5.97
3	38925	7.99
4	48364	9.86
5	59511	11.93
6	N/A	N/A
Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	6.02	5.96

DOWNHOLE EQUIPMENT

C:\Data\Sandridge Yost\MMS158 Depthlog new.dta

Shuttle Running Tool 3.5" )  
SRT-A.A 40 LG: 6.62 ft WT: 37.5 lb OD: 2.52 in

Empty Battery  
MLK-A 2 LG: 14.23 ft WT: 30.9 lb OD: 2.24 in

Empty Battery  
MLK-A 3 LG: 14.23 ft WT: 30.9 lb OD: 2.24 in

MBS-F.A 200v Compact Battery Sub  
MBS-F.A 134 LG: 10.22 ft WT: 81.6 lb OD: 2.24 in

Compact Memory Sub E.B  
MMS-E.B 158 LG: 5.20 ft WT: 37.5 lb OD: 2.24 in



Compact Tool Isolator sub.  
MTI-B.A 63 LG: 1.54 ft WT: 13.2 lb OD: 2.24 in

Compact Short Gamma  
MGS-C.J 133 LG: 3.41 ft WT: 24.3 lb OD: 2.24 in

Compact Collar Locator  
MCL-B.J 72 LG: 3.17 ft WT: 26.5 lb OD: 2.24 in

SKJ-E.B Compact Knuckle Joint  
SKJ-E.B 458 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

SHA-J.A Compact Swivel Head Adaptor  
SHA-J.A 432 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

MIS-A.A Compact Inline Bowspring sub  
MIS-A.A 247 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact Neutron  
MDN-B.J 423 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

Compact Density/Caliper  
MPD-D.A 471 LG: 9.59 ft WT: 90.4 lb OD: 2.24 in

MIS-D.A Compact Inline Bowspring sub  
MIS-D.A 315 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

SHA-J.B Compact Swivel Head Adaptor  
SHA-J.B 595 LG: 2.30 ft WT: 22.0 lb OD: 2.24 in

SKJ-E.B Compact Knuckle Joint  
SKJ-E.B 477 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

MIS-A.A Compact Inline Bowspring sub  
MIS-A.A 62 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

Compact MMI Memory Section  
MIM-A.A 157 LG: 4.65 ft WT: 26.5 lb OD: 2.24 in

Compact MMI Electrode Section  
MIE-A.A 209 LG: 13.96 ft WT: 99.2 lb OD: 4.09 in

MIS-D.A Compact Inline Bowspring sub  
MIS-D.A 593 LG: 5.70 ft WT: 33.1 lb OD: 2.24 in

SKJ-E.A Compact Knuckle Joint  
SKJ-E.A 166 LG: 2.17 ft WT: 24.3 lb OD: 2.24 in

MIS-B Compact Inline Standoff sub  
MIS-B 107 LG: 2.14 ft WT: 15.4 lb OD: 2.24 in

Compact Induction  
MAI-C.A 427 LG: 12.52 ft WT: 48.5 lb OD: 2.24 in

Total Length: 140.41 ft Weight: 862.0 lb



66.87 ft NPRL - Limestone Neutron Por.

59.63 ft CLDC - Density Caliper  
57.70 ft DPRL - Limestone Density Por.  
57.70 ft DEN - Compensated Density  
57.70 ft DCOR - Density Correction  
57.64 ft PDPE - PE

Tool Zero (1.84ft from bottom)  
All measurements relative to tool zero.

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Elevation Drill Floor	2766.00	feet	Depth Driller	9033.00	feet
Elevation Ground Level	2747.00	feet	Depth Logger	9005.00	feet



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